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MINISTRY OF SKILL DEVELOPMENT
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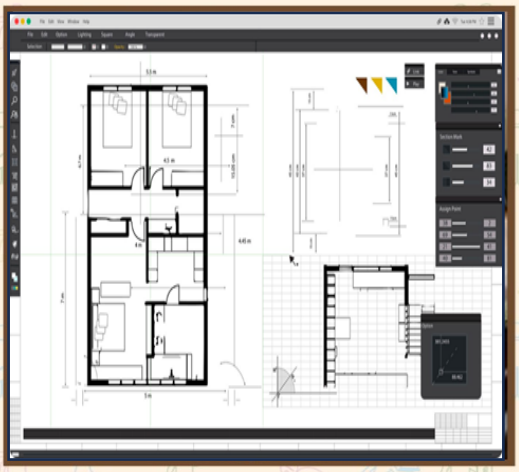
Facilitator Guide



Sector
Interiors, Furniture and Fixtures

Sub-Sector
Interior Design and Installation

Occupation
Interior Designing

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Draughtsperson (Interior Design)

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Skilling is building a better India. If we have to move India towards development then Skill Development should be our mission.

Shri Narendra Modi
The Prime Minister of India

Acknowledgements

Furniture and Fittings Skill Council (FFSC) would like to express its gratitude to all the individuals and institutions who contributed in different ways towards the preparation of this "Facilitator Guide". Without their contribution it could not have been completed. Special thanks are extended to those who collaborated in the preparation of its different modules. Sincere appreciation is also extended to all who provided peer review for these modules.

The preparation of this facilitator guide would without the Furniture & Fittings Skill Industry's support. Industry feedback has been extremely encouraging from inception to conclusion and it is with their input that we have tried to bridge the skill gaps existing today in the industry.

This facilitator guide is dedicated to the aspiring youth who desire to achieve special skills which will be a lifelong asset for their future endeavours

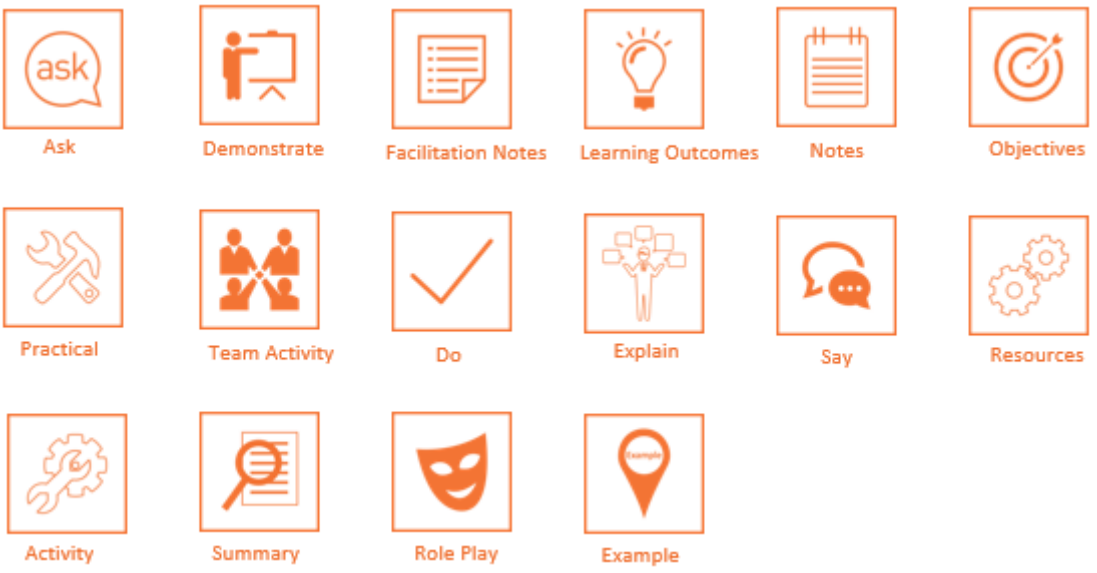
About this Guide

This Facilitator Guide is designed for providing skill training and /or upgrading the knowledge level of the Participants to take up the job of an "Draughtsperson (Interior Design)" in the Furniture and Fitting Skill Council.

This Facilitator Guide is designed based on the Qualification Pack (QP) under the National Skill Qualification framework (NSQF) and it comprises of the following National Occupational Standards (NOS)/topics, electives and additional topics.

1. FFS/N0203: Conduct site survey and recce for interior design drafting purpose
2. FFS/N0204: Preparation of the drawings for interior design project and team supervision
3. FFS/N8205: Follow workplace health, safety, and environmental procedures
4. DGT/VSQ/N0102: Employability Skills (60 Hours)
5. Elective 1: Residential and Kitchen - FFS/N0205: Prepare the interior design drawings and renders for Residential and Kitchen projects
6. Elective 2: Hospitality - FFS/N0206: Prepare the interior design drawings and renders for Hospitality projects
7. Elective 3: Commercial - FFS/N0207: Prepare the interior design drawings and renders for Commercial projects
8. Elective 4: Academic Institutions - FFS/N0208: Prepare the interior design drawings and renders for Academic Institution projects
9. Elective 5: Retail Fitout and Exhibitions - FFS/N0209: Prepare the interior design drawings and renders for Retail Fitout and Exhibitions projects

Symbols Used



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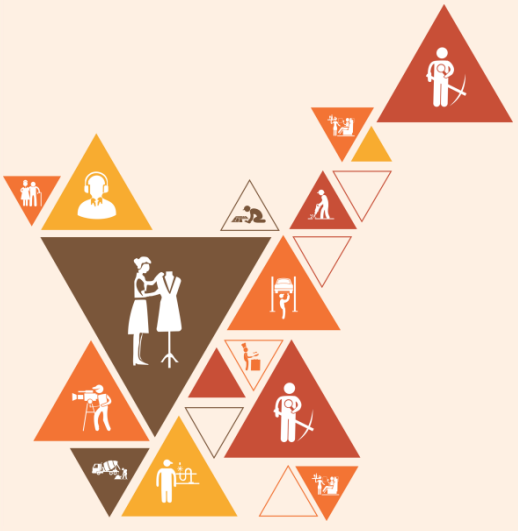

Bridge Module

Key Learning Outcomes

At the end of this module, the participants will be able to:

1. Describe the scope and significance of the interior industry.
2. Explain the process flow of an interior designing project.
3. Identify the difference between interior drafting, interior designing, and interior project management.
4. Identify the types of industries enabling the Interiors industry.
5. Explain the relationship between interiors and the furniture industry.
6. Analyse different interior projects for the purpose of categorization.
7. Describe the organizational structure and highlight the importance of the interior designing division.
8. Identify various organizational processes, code of conduct, reporting matrix, and escalation hierarchy.
9. List all the documents required to carry out the job, such as the job card and checklist for oneself.
10. Explain the importance of job cards and timely reporting to supervisors in employee performance evaluation.
11. Explain the importance of working towards team objectives and goals.
12. Explain the importance of effective communication and interpersonal skills.
13. Identify the common reasons for interpersonal conflicts and ways of managing them effectively.
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27. Describe the occupational map of the interiors industry.
28. Describe the interior designing occupation and related job roles.
29. Describe the attributes and basic skill sets required for a Draughtsperson (Interior Design).
30. Explain the role, responsibilities, and key result areas of a Draughtsperson (Interior Design).
31. Describe the career progression path for a Draughtsperson (Interior Design) job role.
32. Discuss the regulatory authorities, laws, and regulations related to an individual while working.

UNIT 1.1: Interior and Allied Industry

Unit Objectives

At the end of this unit, the participants will be able to:

1. Describe the scope and significance of the interior industry.
2. Explain the process flow of an interior designing project.
3. Identify the difference between interior drafting, interior designing, and interior project management.
4. Identify the types of industries enabling the Interiors industry.
5. Explain the relationship between interiors and the furniture industry.
6. Analyse different interior projects for the purpose of categorization.

Resources to be Used

Participant handbook, Whiteboard, Marker, Projector, Sample Project Drawings (Plan, Elevation, Section) , Interior Space Images (digital or print), Timer or stopwatch.

Ask

- What comes to mind when you hear the word ‘interior design’?
- Have you observed how residential and commercial spaces are designed differently?
- Which industries do you think support interior designers in completing a project?
- What role do you think a draughtsperson plays in this industry?

Say

Welcome to the training program for Draughtsperson – Interior Design. In this journey, you will develop the technical and practical knowledge required to translate design ideas into detailed drawings and site layouts.

We begin with Unit 1.1, where you will get a clear understanding of the interior design industry, its scope, key roles, enabling sectors, and project categories. This foundation will help you appreciate how your work as a draughtsperson fits into the bigger picture of interior projects.

Explain

The interior industry in India is expanding rapidly due to urban development, lifestyle changes, and technology integration. This industry does not only involve beautification but also functionality, safety, and sustainability. Draughtspersons support this transformation by turning design ideas into executable plans that contractors and site teams follow.

- **Interior Designer**: Plans the aesthetics, materials, layout, and user experience.
- **Draughtsperson**: Prepares technical drawings, floor plans, elevations, and service layouts.
- **Project Manager**: Coordinates timelines, vendors, and budgets on-site.
- As a draughtsperson, your accuracy and clarity in drawings directly impact how well a design is implemented.

Most interior projects follow these phases:

1. Client Briefing
2. Site Survey
3. Conceptual Design
4. Drafting and Documentation
5. Vendor Coordination and Procurement
6. Execution and Installation
7. Handover and Feedback

You will primarily contribute during the drafting, documentation, and execution phases.

Your work will require interaction with allied industries like:

- Furniture and Modular Systems
- Lighting and Electrical Fixtures
- Paint and Surface Finishes
- Tiles, Glass, and Ceramics
- Plumbing and Sanitary Ware
- Soft Furnishing and Decor

Understanding how each sector contributes will help you create better, more coordinated drawings.

Furniture is integral to space functionality. As a draughtsperson, you'll represent furniture in layouts using standard symbols, dimensions, and placement logic to help designers and clients visualize space usage.

Each type of space has its unique requirements. Common categories include:

- **Residential**: Homes, apartments
- **Commercial**: Offices, co-working spaces
- **Hospitality**: Hotels, restaurants
- **Retail**: Shops, malls
- **Institutional**: Schools, hospitals
- **Recreational**: Museums, clubs, lounges

Each requires different detailing standards and layouts, which you will learn to interpret and prepare.

Image Reference: Fig. 1.1.3: Furniture and Fixture Layout (Top View)

This top view layout illustrates the arrangement of furniture and fixtures within an office space. It includes 16 workstations arranged in clusters, a CEO cabin, a conference room with a table and chairs, a reception area with seating, a pantry, full-height storage cabinets, and utility zones like printer space. The plan also marks service heights and entry points.

Image Reference Fig. 1.1.4: Preliminary Space Planning
This top view drawing represents the initial space planning for an office. It includes dimensioned workstations, a CEO cabin, conference room, pantry, and reception area. Circulation paths, wall placements, and service locations are marked, helping draughtspersons visualize spatial organization before finalizing detailed layouts.

Image Reference Fig. 1.1.6: Electrical and Lighting Plans
This layout shows the electrical and lighting points for the office space, including light fixtures, fan points, switchboards, power sockets, and AC units. It specifies circuit numbers, fitting types, and service locations for workstations, the conference room, CEO cabin, pantry, and reception—ensuring functionality and compliance with electrical planning standards.

Debrief

The interior industry is broad and dynamic, involving multiple players and processes. As a draughtsperson, you serve as the bridge between concept and construction. Your skills in precision and documentation ensure that every idea becomes a reality, efficiently and accurately."

Notes for Facilitation

- Use visual charts to show the interior design workflow and team roles.
- Provide real-life case examples of how incorrect drawings caused delays or cost overruns.
- Emphasize the practical role of draughting in ensuring coordination among vendors.
- Encourage participants to keep a glossary of industry terms introduced in this unit.

Guidelines to Perform Activity: Group Discussion Relationship between Interiors and the Furniture Industry

Instructions for Groups

Ask each group to discuss the following key angles:

- Functional linkage: How furniture affects space planning
- Aesthetic contribution: Enhancing ambience and style
- Customization: Working with manufacturers and clients
- Market trends: Influence of new furniture designs on layout planning
- Supply chain: How interior work depends on furniture availability and costing
- Sustainability: Eco-friendly furniture in modern design

Prompt with sample questions (from the activity file):

- Can an interior be complete without furniture?
- How does furniture innovation (like foldables or modulars) change planning?
- What procurement or sourcing issues do designers face?
- How do client preferences drive furniture layout and detailing?

Group Sharing

- Each group will nominate one speaker to present a summary of their discussion (2–3 mins per group).
- The facilitator should listen, acknowledge contributions, and ask 1–2 follow-up questions for clarity or extension.

UNIT 1.2: Organizational Context

Unit Objectives

At the end of this unit, the participants will be able to:

1. Describe the organizational structure and highlight the importance of the interior designing division.
2. Identify various organizational processes, code of conduct, reporting matrix, and escalation hierarchy.
3. Explain the importance of working towards team objectives and goals.
4. Explain the importance of effective communication and interpersonal skills.
5. Identify the common reasons for interpersonal conflicts and ways of managing them effectively.
6. Explain the use of appropriate behaviour and language while communicating with colleagues.
7. Explain how to report problems that need escalation.
8. Explain active listening skills while communicating.

Say

Understanding how an interior design organization functions gives you the clarity needed to collaborate effectively and contribute as a draughtsperson. In this unit, we explore team structures, ethics, communication protocols, and professional behaviors expected in a studio or firm setting.

In any interior design project, a structured team works together to convert concepts into reality.

Explain

Organizational structure helps define workflow and authority. Common structures include:

- **Vertical hierarchy** (common in large firms)
- **Flat teams** (in startups or small studios)
  In both, the draughtsperson plays a technical role by working under the designer or project manager. Large firms may also include BIM experts, quantity surveyors, and site coordinators. Understanding how these roles intersect is critical when issuing drawings or clarifying feedback.

Tip for trainer: Use an actual firm's org chart as a reference (remove company name if needed).

Key functions of a draughtsperson extend beyond floor plans. They include:

- Compliance with accessibility standards (like NBC)
- Ergonomic layout planning (especially in offices)
- Vendor coordination for material sourcing
- Providing 3D visuals for client clarity Draughtspersons support these functions by providing detailed working drawings, material callouts, and service plans.

For Example: A hotel project may require the interior team to coordinate room layouts, lobby ambiance, and even signage designs.

Design firms follow standardized procedures to ensure consistent project delivery.

While most firms follow a 7-stage process, some may use digital workflows through tools like Trello, Asana, or Revit/BIM 360. Understanding these workflows helps draughtspersons manage files, follow-up on approvals, and deliver stage-wise drawings efficiently.

For example: Studio culture may vary—some prefer agile sprints (weekly targets), while others use milestone planning.

Trainer tip: Show a sample tracker used by design teams (even Excel-based).

Task ID	Task Description	Assigned To	Start Date	Due Date	Status	Remarks
T01	Prepare Concept Layout - Office	Draughtsperson A	01/07/2025	03/07/2025	Completed	Approved by designer
T02	Issue Revised GFC Drawings	Draughtsperson B	03/07/2025	05/07/2025	In Progress	Awaiting inputs from design lead
T03	Collect Site Measurement - Washroom	Site Engineer	02/07/2025	04/07/2025	Completed	Measurement uploaded to folder
T04	Coordinate with MEP for Lighting Plan	Draughtsperson A	04/07/2025	06/07/2025	Pending	To be scheduled
T05	Submit Final Drawings to Client	Project Manager	06/07/2025	08/07/2025	Pending	Submission date fixed

Technical accuracy must be backed by ethical and professional behavior.

Beyond punctuality, professionalism includes:

- **Confidentiality**: Never share project files externally.
- **Originality**: Avoid copying competitor's designs or CAD blocks.
- **Responsibility**: Own errors and corrections.
- **Tool Legitimacy**: Use only licensed AutoCAD or SketchUp versions.

Many studios maintain a non-disclosure agreement (NDA) even with interns.

Say

Clear reporting reduces errors and avoids unnecessary delays.

Escalation is not about complaint, it's about clarity. When a draughtsperson does not receive proper input, they should:

1. Document the request
2. Follow-up after a reasonable time
3. Escalate politely to a team lead
   Use written communication with drawings and issue logs to track revisions.

Collaboration ensures smoother workflow and better quality outcomes.

Draughtspersons must coordinate across:

- Designers: For layout confirmation
- Site team: For measurement clarifications
- Vendors: For fixing drawing mismatches
  Coordination reduces rework and builds team trust. Many firms use shared drives or platforms like Google Drive or BIM 360 for collaborative work.

Most of the firms now prefer multi-disciplinary meetings where drafts, MEP, and furniture teams discuss overlays.

Good communication can prevent technical errors and project delays.

Verbal and written clarity are crucial. Draughtspersons should:

- Take notes during design briefings
- Confirm changes via markup comments
- Label drawings clearly (with version/date/author)
  Using standard email templates, polite tone, and visual callouts (clouding revisions) makes a big difference.

Compare a poorly written and a well-written communication about drawing revisions.

Workplace misunderstandings should be resolved respectfully and quickly.

Conflicts often arise due to:

- Vague design briefs
- Misinterpreted site dimensions
- Delay in approvals
  The solution is not blame but structured resolution: documenting issues, requesting clarification, and, if needed, involving a senior.

For Example: A site team marks 1200 mm partition, but the drawing shows 1000 mm. The draughtsperson should escalate with dimension evidence from the drawing set and site sketch.

Notes for Facilitation

- Incorporate real-life project scenarios to help participants relate theory to practical workplace challenges.
- Emphasize the importance of ethical practices, including respecting intellectual property, ensuring data confidentiality, and using licensed design software.

UNIT 1.3: Digital and Financial Literacy

Unit Objectives

At the end of this unit, the participants will be able to:

1. Explain the basic parts of a computer, smartphones, and their functioning.
2. Identify various social media platforms: YouTube, WhatsApp, Facebook, Twitter, etc.
3. Explain the Bank Account opening procedure and associated terminologies.
4. Identify the significance of payment methods and gateways for financial transactions.
5. Explain the use of appropriate behaviour and language while communicating with colleagues.
6. Describe how to sign up for an email account.
7. Describe how to search for a video on the internet.
8. Explain how to operate various social media platforms: YouTube, WhatsApp, Facebook, Twitter, etc.
9. Explain the steps involved in a financial transaction using a suitable medium.

Say

Whether you are preparing layouts or coordinating online with a client, understanding how computers and smartphones function is essential to work efficiently as a draughtsperson.

Computers are essential for design work. In addition to the basic parts (CPU, RAM, monitor), participants should know that high-performance CPUs (e.g., Intel i5 or i7) and SSD storage are preferred in design firms. Graphic cards (GPU) also help in rendering 3D models. Similarly, smartphones with good processors and battery life support mobile productivity apps like SketchUp Viewer, WhatsApp, and PDF readers.

Social media platforms are more than entertainment tools—they help professionals network, market, and access learning resources.

Explain

Apart from using YouTube for design tutorials, platforms like LinkedIn help build professional presence, Facebook Groups connect with design communities, and WhatsApp is used by project teams for instant updates. Reels and posts can also showcase project progress to clients. It is essential to maintain a professional tone online to build credibility.

As professionals, you'll often need to share receipts, pay vendors, or manage small purchases. Knowing how digital payments work is vital.

While draughtspersons don’t manage project budgets, they must know how to reimburse purchases, verify advance payments before starting drawings, and attach receipts to task sheets. UPI is the most convenient method for small vendors. Awareness of IMPS/NEFT helps when handling urgent fund transfers. Security tip: Never share OTP or PIN.

Do

Demonstrate a mock UPI payment screen or IMPS receipt download if possible.

Explain

Having a bank account is the first step to receiving payments, buying software licenses, and maintaining financial independence.

Today, many draughtspersons work as freelancers and need to manage their own earnings. Knowing account types (Savings vs. Current), understanding IFSC, and managing net banking securely is key. Encourage participants to sign up for mobile banking apps and understand their interface. KYC updates must be done regularly to avoid transaction blocks.

Email is the primary method of formal communication in the design industry—be it sharing drawings or project updates."

Guide participants to create a professional email ID (e.g., name.design@gmail.com). Teach inbox management—how to label folders (e.g., Site Updates, Client Feedback), attach files properly, and avoid spam. Emphasize the use of polite, concise, and structured writing while emailing drawings or responding to site queries.

Do

Ask participants to compose and send a test email with attachment as practice.

Explain

They can solve design or software issues quickly if you know how to search relevant videos online.

Use specific keywords while searching: instead of “AutoCAD,” search “AutoCAD door block insertion 2D.” Encourage safe browsing practices—avoid pirated software download links and use educational channels like Autodesk Education, Skillshare, or Indian design tutors on YouTube.

Demonstrate a live search for “3D wall panel design in SketchUp.”

Knowing how to engage with social media tools smartly can enhance your network, learning, and career opportunities.

You should distinguish between casual and professional usage. On Instagram, they can follow accounts like @dezeen, @archdigestindia; on LinkedIn, they can connect with design mentors. Teach how to adjust privacy settings and avoid sharing work-in-progress visuals publicly without client approval.

Whether it's buying software, reimbursing site expenses, or receiving payment for freelance work—digital transactions are the norm.

Explain basic e-receipt management, generating UPI transaction IDs, checking statement summaries, and saving PDF receipts. Demonstrate how to screenshot or forward a digital transaction with clear subject lines. Help participants recognize fraud alerts (e.g., fake payment links, phishing SMS).

Do

Ask participants to create PPT demonstrating the steps for a UPI payment (no real transaction).

Notes for Facilitation

- Use functional laptops and mobile phones for hands-on training.
- Encourage the participants to visit the additional links given in the participant handbook.

Guidelines for Performing Activity: Exploring Social Media Platforms

Preparation (Before Class)

- Ensure internet connectivity and working devices (smartphones or computers).
- Prepare a printed checklist of steps (or share digitally).
- If possible, create dummy accounts for practice or ask participants to bring their own credentials (respect privacy).
- Set up a projector to demonstrate initial tasks.

Tell them that today we'll explore how platforms like YouTube, WhatsApp, Facebook, and Twitter/X can be used for more than just socializing. As a draughtsperson, you may use them to access tutorials, connect with industry experts, and even promote your work. Let's get hands-on with each platform.

Instructions and Task Flow

Divide participants into pairs or small groups and assign each group a platform to begin with. Rotate after completing each task.

Task 1: YouTube

- Demonstrate how to search "Interior Design Tips" or "AutoCAD Tutorial."
- Ask participants to subscribe to a channel and share the link with a classmate via WhatsApp.
- Optional: Ask them to comment on the video (professionally).

Task 2: WhatsApp

- Participants should send a simple message, photo, and voice note.
- Guide them to create a group with peers and send one educational message (e.g., tip of the day).
- Reinforce etiquette and privacy when using messaging platforms for work.

Task 3: Facebook

- Guide participants to create a post about today's class.
- Help them like/comment on a classmate's post.
- Search and follow a design-related page or group such as "Interior Design Community India."

Task 4: Twitter (X)

- Participants should tweet a message like "#LearningDigitalSkills in class today!"
- Ask them to follow one relevant interior design or architecture-related account.
- Encourage discussion around trending hashtags and why it matters in content visibility.

Notes for Facilitation

- Monitor participants ' screens gently and help if they face login or navigation issues.
- Emphasize privacy settings, safe browsing, and professional language in posts and chats.
- Avoid forcing participants to use personal accounts—offer alternatives through demo logins or simulations.
- Discuss potential applications in a design context: client groups, tutorial subscriptions, or digital portfolios.

UNIT 1.4: Role of a Draughtsperson (Interior Design)

Unit Objectives

At the end of this unit, the participants will be able to:

1. Describe the occupational map of the interiors industry.
2. Describe the interior designing occupation and related job roles.
3. Describe the attributes and basic skill sets required for a Draughtsperson (Interior Design).
4. Explain the role, responsibilities, and key result areas of a Draughtsperson (Interior Design).
5. Describe the career progression path for a Draughtsperson (Interior Design) job role.
6. Discuss the regulatory authorities, laws, and regulations related to an individual while working.
7. List all the documents required to carry out the job, such as the job card and checklist for oneself.
8. Explain the importance of job cards and timely reporting to supervisors in employee performance evaluation.
9. Explain how to fill a sample job card for submission.

Say

In every construction or renovation project, multiple professionals work together. Let's understand where interior designers and draughtspersons fit into this ecosystem.

The interior design industry offers diverse career paths from concept development to execution. A draughtsperson operates within technical roles and can move upward to project coordination and management. Firms often differentiate between FF&E designers, CAD drafters, BIM specialists, and project leads—offering vertical and lateral growth options. Freelancing and consultancy are also popular paths in India's metro cities.

Do

Show the occupational map and ask participants to locate the draughtsperson's role and career path.

Say

To perform effectively in an interior design project, a draughtsperson needs more than just technical knowledge. Let us understand the key skills and professional qualities that are essential for this role.

Apart from mastering AutoCAD and Revit, attention to detail, time management, responsiveness to feedback, and ownership of deliverables make draughtspersons reliable team members. Being proactive during coordination meetings, asking the right questions,

and documenting drawing revisions set professionals apart. Basic knowledge of carpentry, MEP coordination, and finish materials enhances quality of drawings.

The draughtsperson is the link between the design concept and its execution on site. Let's understand the depth of this role.

Explain

Besides making drawings, draughtspersons track changes, communicate with vendors, flag construction issues, and ensure drawings are buildable. They support the design lead by maintaining document control and providing accurate updates. KPIs include accuracy of drawings, timeliness of submissions, and responsiveness to queries from execution or procurement teams.

Interior design is a dynamic field. Let's look at how your career can progress with experience and learning.

Career growth can lead from draughtsperson to senior draughtsperson, design coordinator, assistant project manager, or even partner in a firm. With digital skills, draughtspersons can switch to BIM, 3D visualization, or construction documentation roles. Industry-recognized certifications (e.g., Autodesk Certified Professional) help build credibility.

Every project must meet legal standards, and draughtspersons contribute to compliance through their drawings.

Familiarity with NBC, ECBC, local building bye-laws, fire codes, and accessibility norms is important. Drawings submitted for sanction must reflect these codes. Draughtspersons may be required to mark setbacks, fire egress paths, and minimum toilet sizes. Work safety and digital ethics (software licensing) are also under compliance.

Do

Refer participants to NBC 2016 and discuss common design guidelines related to office and residential spaces.

Say

A draughtsperson's job is not over after making drawings—they need to document and track tasks too.

Job cards act as formal task trackers in design studios. These cards include drawing titles, scope, version updates, and approvals. They ensure accountability and prevent confusion during coordination. Checklists help ensure no detail is missed—e.g., is circulation space maintained, are electrical symbols present, is title block updated?

Notes for Facilitation

- Use visuals and real samples—job cards, org charts, skill maps.
- Encourage participants to discuss past group projects to identify skills relevant to a draughtsperson.
- Display industry resources such as job roles from interior design job portals (e.g., Naukri, LinkedIn).
- Reinforce digital ethics—ensure participants know piracy, software misuse, or non-disclosure can result in termination or legal action.

Solution to Exercise

Guidelines for Practicing Active Listening Skills in Communication

Role Play and Reflection
Duration: 45–60 minutes
Target Outcome: Strengthen participants' ability to listen attentively, capture key details, and respond accurately in project communication settings.

Materials Required

- Printed role cards or scenario sheets (3 provided in the activity document)
- Notepad and pen for each learner
- Stopwatch/timer
- Whiteboard and marker (for debrief)

Pre-Activity Setup

- Divide the class into small groups (3–4 participants per group).
- Brief each group on the goal: simulate a real workplace conversation between two team members.
- Distribute role cards randomly. Ensure each pair/group gets a different scenario.

Activity Instructions

Role Play (15–20 min)

- One learner plays the "speaker" and reads/explains the scenario aloud to another learner acting as the "listener."
- The listener must not interrupt—only listen and take notes.
- After the speaker finishes, the listener summarizes the key points verbally to confirm understanding.
- Rotate roles and repeat the activity with a new scenario.

1. **Observation Task for Other Group Members:**

- Observe and note body language, attention span, and any missed details.

Debrief and Discussion

Debrief Prompt:
"How did it feel to be the listener? Were there any points you missed or misunderstood? Why is this skill crucial on a site or in a project meeting?"

Key Points to Reinforce:

- In design work, instructions often involve measurements, materials, and deadlines.
- Missing even one detail can cause a major mismatch between the design intent and execution.
- Active listening requires eye contact, summarising, note-taking, and clarifying doubts politely.

Tips and Notes

- Walk around during the activity to observe and offer silent cues or corrections.
- Encourage peer feedback—ask "What did the listener do well?"
- Emphasize that emails, calls, and meetings all depend on listening skills, especially when multiple teams are involved (e.g., MEP, structural, design).
- Relate examples from real projects where listening failure led to redesign or cost escalation.

Guidelines for the Activity: How to Search for a Video on the Internet

Materials Required

- Smartphones, tablets, or computers (one per learner or per pair)
- Stable internet connection
- Whiteboard or projector (optional for demonstration)
- Sample keywords or prompts for practice

Trainer Preparation

- Test the internet connection and check that YouTube is accessible on the devices.
- Prepare a few search keywords to project or write on the board (e.g., "Interior CAD tutorial", "How to read technical drawings").
- Optionally, identify and bookmark a few sample videos ahead of time in case of connectivity issues.

Activity Instructions (Do)

Step-by-Step Instructions for Participants:

1. Open a web browser like Chrome or Firefox.
2. Go to www.google.com.
3. Type a search query related to interior drafting (trainer can suggest examples).
    - Examples:
        - "How to read AutoCAD drawings"
        - "Interior drafting techniques"
        - "Drafting standards in interior design"
4. Review the results—guide them to click on the "Videos" tab or locate YouTube links.
5. Select one relevant video and watch it for 2–5 minutes.
6. Ask them to explore features like pause, replay, full screen, playback speed, and volume.

Trainer's Role During the Activity

- Circulate to assist with navigation, spelling corrections, or device support.
- Guide participants to identify educational and trustworthy video sources.
- Ask participants to note the title and one key learning from the video they watched.

Tips and Notes

- Suggest safe practices: avoid downloading unknown links, verify channel credibility.
- Emphasize using keywords that are specific to the design field.
- Encourage participants to subscribe to reliable educational channels (e.g., Autodesk Education, How to Rhino, etc.).
- Provide a printable handout with sample keywords if needed.

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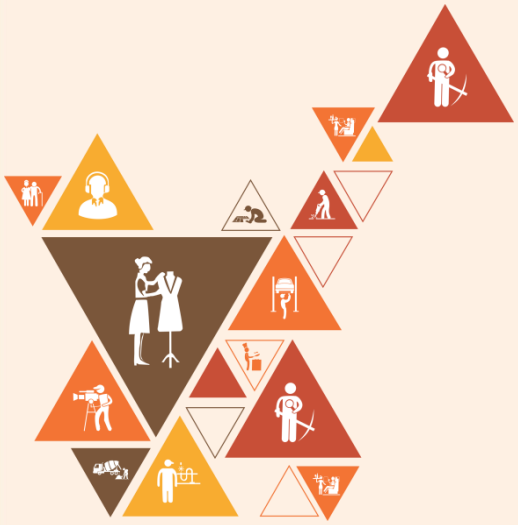
2. Introduction to Various Types of Interior Projects, Products, Materials, and

Unit 2.1 - Interior Design Basics and Process Flow

Unit 2.2 - Furniture Trends and Interior Projects



Key Learning Outcomes

At the end of this module, the participants will be able to:

1. Define interior drafting, interior designing, and interior project management.
2. Illustrate the process flow of an Interior Designing project.
3. Classify different types of Interior Design projects in terms of space, theme, and styles.
4. List the various types of advanced raw materials and accessories used in an Interior Design project.
5. Differentiate between types of raw material as per the given checklist.
6. List the various categories of advanced architectural hardware and fittings used designing and their usage.
7. Identify the architectural hardware as per the type of application.
8. List the different types of furniture and their area of applications.
9. Outline the latest trends and advancements related to the interior designing process.
10. Analyse different Interior projects for categorization based on space, style, and themes.
11. Examine the Interior projects and define the theme and elements.
12. Explain the steps involved in the interior design project from client deliberations to project handover and signoff.

UNIT 2.1: Interior Design Basics and Process Flow

Unit Objectives

At the end of this unit, the participants will be able to:

1. Define interior drafting, interior designing, and interior project management.
2. Illustrate the process flow of an Interior Designing project.
3. Classify different types of Interior Design projects in terms of space, theme, and styles.
4. List the various types of advanced raw materials and accessories used in an Interior Design project.
5. Differentiate between the different types of raw material as per the given checklist.
6. List the various categories of advanced architectural hardware and fittings used designing and their usage.
7. Identify the architectural hardware as per the type of application.
8. Analyse different Interior projects for categorization based on space, style, and themes.
9. Examine the Interior projects and define the theme and elements.
10. Explain the steps involved in the interior design project from client deliberations to project handover and signoff.

Resources to be Used

- Participant Handbook, pen, small writing pad, whiteboard, markers, CAD Samples, Material Samples, Architectural Hardware Samples, Projector for showcasing images Whiteboard, visuals of interior design types, examples of job cards or AutoCAD screenshots.

Say

- In this unit, we will cover the technical, creative, and managerial components that form the foundation of interior design. We will distinguish between drafting, designing, and managing an interior project and understand how they integrate to create successful, functional spaces.
- Let's begin with an overview of the interior design industry. This sector is rapidly evolving with increasing urbanization, growing real estate, and the demand for aesthetic, sustainable, and functional spaces.
- Understanding the interior design industry's structure and emerging trends is crucial for Interior Designers, as it directly influences their ability to grow, adapt, and innovate in their roles. Whether working independently, in a studio, or on-site, as an Interior Designers you must be aware of the evolving expectations, skill requirements, and career pathways within the industry. This knowledge helps you plan their professional development, align your work with industry standards, and take strategic steps toward higher-level roles and specializations.

Ask

- What comes to your mind when you hear the word “interior design”?
- Can you share a place where you liked the interior and what made it stand out?
- Why do you think interior designers need to understand both artistic vision and technical execution?

Explain

- **Interior Drafting** involves precise technical drawings including floor plans, elevations, sections, and layout drawings using tools like AutoCAD or SketchUp. It translates design into construction documents.
- **Interior Designing** is the creative development of a space using colour schemes, materials, lighting, furniture, and décor.
- **Interior Project Management** includes planning, coordination, budgeting, scheduling, and overseeing site execution.
- **Interior Design Process Flow**:

  1. Initial Client Consultation
  2. Concept Development & Space Planning
  3. Detailed Design and Visualization
  4. Material Selection
  5. Budgeting
  6. Procurement & Vendor Coordination
  7. Construction & Installation
  8. Styling & Finishing Touches
  9. Client Walkthrough & Handover
  10. Post-completion Support (Optional)

- **Types of Projects**:

  - By Space: Residential, Commercial, Hospitality, Healthcare, Educational
  - By Theme: Modern, Traditional, Transitional, Industrial, Rustic, Bohemian
  - By Style: Minimalist, Art Deco, Scandinavian, Mediterranean, Coastal

- **Materials & Accessories**: Discuss materials like wood, glass, stone, fabric, metal, and concrete. Also, introduce advanced architectural hardware used in doors, windows, furniture, and lighting fixtures.

Notes for Facilitation

- Use visuals and real material samples wherever possible.
- Encourage team presentations to build communication skills.
- Reinforce the linkage between technical plans and aesthetic choices.
- Provide simplified checklists or templates for each activity to ensure clarity in participation.

UNIT 2.2: Furniture Trends and Interior Projects

Unit Objectives

At the end of this unit, the participants will be able to:

1. List the different types of furniture and their area of applications.
2. Outline the latest trends and advancements related to the interior designing process. Define the role of effective communication skills required for Interior Designer

Resources to be Used

Participant Handbook, Furniture Catalogues, Mood Board Samples, Digital Devices for Presentation, Projector, Markers and Charts

Say

Furniture plays a vital role in shaping the aesthetics and functionality of interior spaces. As an Assistant Project Manager, it is important for you to be familiar with different furniture types, their applications, and emerging design trends. Additionally, your communication skills will be crucial in coordinating with clients, teams, and vendors to deliver effective interior projects.

Ask

- Can you name a few types of furniture used in living rooms or offices?
- How do` you think new lifestyle preferences are changing furniture trends today?
- Why are communication skills important for managing interior design projects?

Explain

1. Types of Furniture and Their Applications

- Furniture is categorized based on function and placement:
- Seating Furniture: Sofas, armchairs, recliners – used in living rooms, lounges, and offices.

- Storage Furniture: Cabinets, shelves, sideboards – found in bedrooms, living areas, and workspaces.
- Bedroom Furniture: Beds, nightstands, vanities – serve both utility and design in personal spaces.
- Dining Furniture: Tables, chairs, bar carts – central to dining and entertaining.
- Office Furniture: Desks, office chairs, filing cabinets – essential for productivity.
- Outdoor Furniture: Patio and garden furniture – built for durability and aesthetic in open areas.
- Each type serves a purpose while reflecting cultural, spatial, and functional needs of the setting.

2. Emerging Furniture and Design Trends

- Use of modular, flexible furniture to adapt to changing space needs.
- Smart furniture with integrated technology for convenience.
- Growing focus on sustainable materials like bamboo, reclaimed wood, and metal.
- Minimalist and multi-functional furniture designs for smaller urban homes.
- Shift toward locally inspired designs with modern touches.

3. Role of Effective Communication in Interior Projects

- Strong communication is critical across all stages of an interior project:
- Client Interaction: Helps understand needs, manage expectations, and build trust.
- Design Presentation: Use of mood boards, 3D renderings, and clear language to explain ideas.
- Coordination with Contractors and Suppliers: Ensures clear execution of plans, timelines, and quality control.
- Team Collaboration: Aligns various stakeholders—designers, architects, engineers—for seamless integration.
- Negotiation Skills: Helps manage costs, timelines, and procurement challenges.
- Managing Criticism and Expectations: Involves empathetic responses and managing change requests effectively.
- Written Communication: Essential for proposals, documentation, contracts, and reporting.
- Each of these communication aspects directly impacts the project's success.
- **Debrief**
  To conclude, you need to be familiar with diverse furniture types and trends to support the interior design team effectively. Equally important are your communication skills that enable smooth coordination and client satisfaction. Mastering these competencies ensures a seamless and impactful design process.

Notes for Facilitation

- Share real catalogues or digital portfolios for reference.
- Encourage the use of visual vocabulary (textures, materials, styles) during presentations.
- Provide scenarios in writing for communication roleplay to help participants stay focused and creative.
- Ask the participants if they have any questions.
- Answer all the doubts in case any to the participants.
- Ask them to answer the questions given in the participant manual.
- Ensure that all the participants answer every question.

Solution to Exercise

A. Multiple Choice Questions

1. You are designing a luxury apartment's living room for a client who prefers traditional Indian aesthetics. Which of the following would be the most appropriate material and accessory combination?
   a. Marble flooring with velvet drapes and Tanjore wall art

2. A client wants to renovate their boutique hotel lobby using a Mediterranean style. What materials and finishes would best suit the theme?
   b. Terracotta flooring, wrought iron railings, and sea-inspired colours

3. You are working on a modular kitchen for a high-end apartment. The client emphasizes durability and a modern look. What combination should you choose?
   d. Granite counters, HPL shutters, and stainless-steel pull-out systems.

4. During a project review, a client is confused about the difference between interior drafting and designing. What explanation should you give?
   b. Drafting focuses on construction drawings, designing involves creative planning and aesthetics

5. While designing a commercial office, your client wants an open and collaborative workspace. Which style and furniture would best meet their needs?
   b. Minimalist style with open workstations, ergonomic desks, and glass partitions

Sample Solutions for Hands-On Exercise

Title: Prepare a Business Development Plan **Based** on Specified Marketing and Development Strategies

Expected Outcome:
The Business Development Plan should include:

1. **Target Market Identification:**
    - E.g., High-end residential clients in urban areas; boutique hotels in tourist hubs.
2. **Market Trends Insight:**
    - Emphasis on modular furniture, sustainable materials, and smart interiors.
3. **Marketing Strategies:**
    - Use of digital platforms (Instagram, Pinterest, Houzz)
    - Collaboration with real estate firms, architects, and vendors
    - Portfolio development showcasing trending styles (e.g., Scandinavian, Minimalist)
4. **Development Strategy:**
    - Networking in design expos and trade fairs
    - Training junior designers in tools like AutoCAD and 3D modelling
    - Vendor tie-ups for exclusive materials or discounts
5. **Presentation Format:**
    - Executive Summary
    - SWOT Analysis
    - Short- and Long-term Goals
    - Implementation Timeline
    - Evaluation Metrics

Sample Solutions for Practical Activity 1

Title: Discuss the Latest Trends and Advancements Related to the Interior Designing Process

Expected Points in Discussion:

1. **Modular and Flexible Furniture:**
    - Custom-built to fit small urban homes
    - Easily reconfigurable based on use
2. **Smart Technology Integration:**
    - Home automation (lighting, HVAC, blinds)
    - App-controlled interiors
3. **Sustainable Design Choices:**
    - Use of recycled wood, bamboo, jute, and low-VOC paints

4. **Minimalism and Clean Lines:**
    - Focus on space-saving and decluttered aesthetics
5. **Inclusive Design Principles:**
    - Barrier-free access
    - Universally accessible layouts
6. **Cultural Blends:**
    - Fusion of Indian traditional furniture with contemporary design elements
7. **Virtual Reality (VR) and 3D Rendering Tools:**
    - Used for pre-visualization of projects

Sample Solutions for Practical Activity 2

Title: Categorize Interior Projects by Theme and Space

Objective: To analyse and categorize interior design projects based on theme and space type

Sample Solutions (based on hypothetical case studies):

Case Study	Project Type	Theme	Style
Case 1: Boutique Hotel Lobby with Terracotta tiles, Blue mosaics, and Iron Chandeliers	Hospitality	Mediterranean	Rustic-Coastal
Case 2: Luxury Apartment with Marble flooring, Gold accents, Velvet drapes, and Tanjore art	Residential	Indian Traditional	Opulent
Case 3: Tech Office with Glass walls, Ergonomic Desks, and Open Workstations	Commercial	Minimalist	Contemporary
Case 4: Beach House with Wicker furniture, White-washed wood, and Pastel tones	Residential	Coastal	Light & Airy

Participants' Task: Identify and justify each classification based on visual and descriptive cues.

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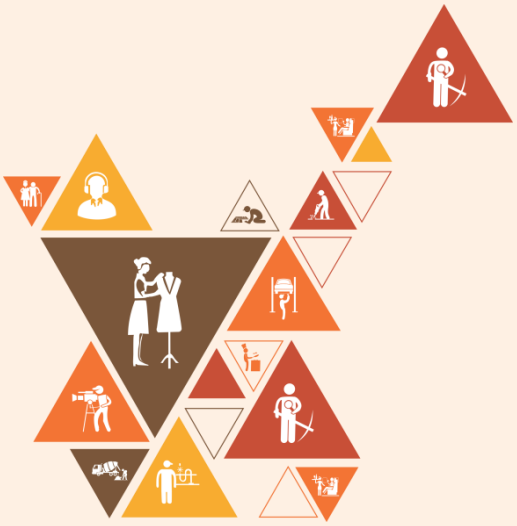
3. Site Survey and Recce for Various Interior Design Projects

Unit 3.1: Layouts for Interior Design Projects

Unit 3.2: Planning and Conducting Site Recce Operations

Unit 3.3: Handling Tools and Raw Materials

Unit 3.4: Site Documentation and Technical Recording



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FFS/N0208, FFS/N0209

Key Learning Outcomes

At the end of this module, the participants will be able to:

1. Discuss the parameters to be considered while interpreting the layout during the site survey.
2. Apply different approaches to prepare the site layouts and drawings.
3. Explain different types of interiors designing projects and illustrate their layout - residential and kitchen, hospitality, academic institution projects and retail fit-out and exhibition projects.
4. State the significance of recce operation and pre-requisites for same.
5. Discuss key prerequisites for conducting site survey and recce of residential and kitchen projects.
6. Discuss the various prerequisites involved in the site survey and recce based on various interior designing projects - residential and kitchen, hospitality, academic institution projects and retail fit-out and exhibition projects.
7. Explain the operating guidelines for using different raw materials, tools, and equipment.
8. Identify various elements of a masonry structure and their representation in the site layouts based on various interior designing projects - residential and kitchen, hospitality, academic institution projects and retail fit-out and exhibition projects.
9. Explain the operational procedures of various tools and equipment in measurement and marking activities.
10. Identify the appropriate handling equipment for the transportation of materials required as per the sample instruction sheet.
11. Describe how to examine the worksite and prepare a list of tools and equipment required for the recce.
12. Explain the process of site photography and videography based on different worksite specifications.
13. Discuss various technical considerations during site photography and videography.
14. Analyse the worksite and employ suitable methods to document the existing site conditions.
15. Plan the site survey in line with project layouts.
16. Identify suitable methods to document the existing site conditions at the worksite.
17. Identify suitable tools and equipment to document the worksite in the form of photos and videos in a commercial project.

UNIT 3.1: Layouts for Interior Design Project

Unit Objectives

At the end of this unit, the participants will be able to:

1. Discuss the parameters to be considered while interpreting the layout during the site survey.
2. Apply different approaches to prepare the site layouts and drawings.
3. Explain different types of interiors designing projects and illustrate their layout - residential and kitchen, hospitality, academic institution projects and retail fit-out and exhibition projects.

Resources to be Used

Participant Handbook, Whiteboard, Marker, Projector, Sample layout drawings for; Residential and kitchen interiors, Hospitality (hotels, restaurants), Academic institutions (schools, colleges), Commercial offices, Retail fit-outs and exhibitions, Site survey checklist template, Manual drafting tools: graph paper, pencil, scale ruler, T-square (for activity), CAD software (AutoCAD, SketchUp – demo version or screenshots), Annotated diagrams comparing L-shaped, U-shaped, Island, and Galley kitchens

Say

Understanding the existing site layout accurately is crucial before beginning any interior design project. In this session, we will explore the parameters that a draughtsperson must examine while conducting a site survey for layout planning.

Ask

- What elements should be measured and recorded during a site survey?
- Why is it important to check natural lighting and ventilation during layout planning?
- How do client inputs affect the layout planning process?

Explain

A site survey serves as the foundation for design execution. It involves more than just measuring dimensions. A draughtsperson must analyse spatial arrangements, structural elements (like beams, columns), existing electrical/plumbing services, and zoning of functions. Also, considerations such as natural light orientation, accessibility norms, client requests, and hidden obstacles (like exposed pipes or damaged surfaces) can significantly affect layout decisions. For each project type, such as residential or retail, the focus parameters may differ. For example, in academic institutions, circulation and safety are paramount, whereas in hospitality, aesthetics and zoning take center stage.

Debrief:
Understanding these parameters ensures the draughtsperson is equipped to interpret the site context correctly and plan feasible and code-compliant layouts.

Notes for Facilitation

- Use site visit photos or videos to explain key observations.
- Share checklists used by professional draughtspersons for site surveys.
- Compare how layout considerations vary for residential vs. retail spaces.

Next, let us now understand the different methods a draughtsperson can use to prepare site layouts, depending on project requirements, scale, and tools available.

Ask

- Which drafting method do you think is most common today?
- When would manual drafting be preferred over digital methods?

Explain

Several approaches are used depending on project needs:

- **Manual Drafting** is a traditional approach using pencils and scales. It builds fundamental understanding.
- **CAD-Based Drafting** is precise, editable, and widely accepted in professional documentation.
- **BIM** integrates 3D models with service data, ideal for large-scale or collaborative projects.
- **Photogrammetry/3D Scanning** uses digital scanning for accuracy in heritage or retrofit projects.
- **Modular Planning** is ideal for kitchens or offices using pre-defined units.
- **Color-Coded Zoning Plans** visually represent functions in early planning stages and aid quick comprehension.

Do

Layout Tool Comparison

- Display sample layouts prepared using manual, CAD, and BIM methods.
- Ask participants to identify differences in output, accuracy, and time-efficiency.

Debrief:
Each approach has its context. The draughtsperson must choose based on project needs, client expectations, and available resources.

Notes for Facilitation

- Provide short video clips demonstrating each approach.
- Introduce free software tools for hands-on experience (e.g., AutoCAD trial, SketchUp).
- Discuss real-life project timelines and how tool selection impacts delivery.

Say

Different interior projects require different layouts. Let us explore layout variations across residential, hospitality, academic, commercial, and retail/exhibition projects.

Ask

- What layout differences do you expect between a home and a hotel?
- Why do kitchen layouts have multiple types?

Explain

Layouts are tailored to function, space, and user experience:

- Residential: Focus on privacy, flow, and utility. Kitchen layouts vary from L-shaped to island, based on usage and space.
- Hospitality: Prioritize guest movement, service access, and ambiance.
- Academic: Safety, cluster seating, and movement-friendly layouts are critical.
- Commercial: Efficiency, privacy, and collaboration zones matter.
- Retail/Exhibition: Focus on visibility, product engagement, and brand identity.

Examples:

- A 2BHK layout will differ drastically from a hotel room layout in terms of zoning and circulation.

- A boutique design highlights aesthetics and product placement, unlike a bank office focusing on security and interaction.

Debrief:
Understanding layout types enables draughtspersons to adapt designs to the space function and user requirement effectively.

Notes for Facilitation

- Use illustrated layout diagrams to enhance understanding.
- Assign teams to develop sample layouts for different sectors.
- Share case studies showing successful design choices based on layout selection.

UNIT 3.2: Planning and Conducting Site Recce Operations

Unit Objectives

At the end of this unit, the participants will be able to:

1. State the significance of recce operation and pre-requisites for same.
2. Discuss key prerequisites for conducting site survey and recce of residential and kitchen projects.
3. Discuss the various prerequisites involved in the site survey and recce based on various interior designing projects - residential and kitchen, hospitality, academic institution projects and retail fit-out and exhibition projects.

Resources to be Used

Participant handbook, Whiteboard, Marker, Projector, Sample "as-built" layout drawings for various project types, Recce checklist templates for residential, hospitality, academic, commercial, and retail sites, Recce toolkit: measuring tape, laser distance meter, scale, sketchbook, pen, camera, Sample site photos and recce documentation formats

Say

Before starting the design process, it is essential for a draughtsperson to thoroughly understand the physical characteristics and conditions of the site. This is achieved through a recce or reconnaissance visit. Let us learn about the importance of conducting a site recce as a foundational step in interior design planning.

Ask

- Why should we visit the site before preparing design layouts?
- What kind of practical problems might we miss if we skip the recce?

Explain

Recce operations help in identifying real-site challenges and aligning design intent with actual space conditions. It ensures accurate measurement and assessment of site constraints such as uneven floors, low ceilings, or immovable fixtures. Through photographic documentation and interaction with the client, the draughtsperson can assess not just physical parameters but also preferences, expectations, and compliance issues. This avoids design rework and ensures efficient space planning. In complex settings like hospitality or retail, recce is essential for aligning service zones and customer flow.

Debrief:
The purpose of a recce is to observe, question, and align the space with its future function.

Notes for Facilitation

- Share real project recce reports or site images.
- Emphasize areas where poor recce led to design errors.
- Introduce sample 'as-built drawings' from recce data.
- A well-prepared draughtsperson makes the most of a site recce. But what are the essentials that must be in place before stepping onto the site?

Ask

- What tools do you think are necessary for a site recce?
- How might the preparation differ for a retail store versus a school?

Explain

Each interior project type requires its own recce checklist. However, there are universal pre-requisites:

- Carry measurement tools (laser tape, scale, measuring tape)
- Camera or mobile for photographic documentation
- Floor plan printouts (if available) or sketchbook
- PPE (helmet, shoes) if the site is under construction
- Client questionnaire/checklist

Project-specific focus:

- Residential/Kitchen: Ergonomics, lifestyle use, storage zones
- Hospitality: Service flows, guest zones, ambiance lighting
- Commercial: Workstation zoning, service points, acoustics
- Academic: Classroom clustering, movement flow, admin areas
- Retail/Exhibition: Display planning, footfall flow, branding needs

A Recce Kit (short for Reconnaissance Kit) is a set of tools and materials that a draughtsperson or interior designer carries during a site visit to accurately inspect, measure, document, and assess the site before beginning any design work.

Recce Kit Typically Includes

1. Measuring Tools
   - Measuring tape (preferably 5m–10m)
   - Laser distance measurer (for fast and accurate room dimensions)
   - Scale ruler (for on-spot sketch scaling)
2. Recording Tools
   - Notebook or sketchbook
   - Graph paper or layout templates
   - Clipboard or hard surface to write on
   - Pens, pencils, markers (multiple colors for marking zones)
   - Floor plan printouts (if pre-construction plans are available)
3. Visual Documentation Tools
   - Smartphone with camera (for photographs and video walk-throughs)
   - DSLR or digital camera (optional, for professional-quality photos)
4. Digital Tools (Optional)
   - Tablet or iPad with apps like AutoCAD Mobile, MagicPlan, or SketchUp Viewer
   - Power bank for phone/tablet charging
   - Laser scanner or 3D scanning device (for advanced recce or retrofit projects)
5. Safety Gear (if site is under construction)
   - Helmet
   - Safety vest
   - Safety shoes
   - Torch or flashlight
6. Reference Documents
   - Project brief or client questionnaire
   - Recce checklist template
   - Building drawings, if available (printed or digital)

Debrief:
Being prepared with the right tools and project-specific focus helps the draughtsperson record meaningful data and avoid repeat visits.

Notes for Facilitation

- Display a physical or digital 'recce kit'.
- Use project briefs to trigger checklist creation.
- Share examples of poor vs. good recce preparation outcomes.

UNIT 3.3: Handling Tools and Raw Materials

Unit Objectives

At the end of this unit, the participants will be able to:

1. Explain the operating guidelines for using different raw materials, tools, and equipment.
2. Identify various elements of a masonry structure and their representation in the site layouts based on various interior designing projects - residential and kitchen, hospitality, academic institution projects and retail fit-out and exhibition projects.
3. Explain the operational procedures of various tools and equipment in measurement and marking activities.
4. Identify the appropriate handling equipment for the transportation of materials required as per the sample instruction sheet.
5. Describe how to examine the worksite and prepare a list of tools and equipment required for the recce.

Say

As a draughtsperson, it is essential to understand the correct handling, storage, and operating practices for materials like plywood, tiles, and glass, as well as tools ranging from manual cutters to CAD software. Adhering to standard operating guidelines not only ensures safety and precision but also supports quality execution and compliance with industry standards. Let us learn about various raw materials, tools, and digital equipment used in interior design work.

Ask

- Why is it important to follow standard procedures while handling materials and tools?
- What could go wrong if tools are misused or materials are poorly stored?

Explain

Each material such as plywood, tiles, paint, or glass requires specific guidelines for storage, handling, and application to maintain its integrity and performance. Similarly, tools whether manual like cutters and measuring tapes or digital like AutoCAD and plotters must be used in accordance with proper calibration, maintenance, and operational practices. Adhering to national and international standards (such as IS and ISO) not only minimizes the risk of errors but also extends the lifespan of materials and equipment. It ensures consistent quality in drafting, modeling, and on-site layout execution.

Debrief:
Adhering to operating procedures helps reduce project delays and ensures worker and site safety.

- Display real samples of raw materials like plywood, laminate, or tile.
- Show demonstration videos for using tools like a laser measurer or cutter.
- Discuss a case where incorrect handling led to design failure.

Interior designs must align with the underlying structural system of the building. Today, we will explore how to identify and represent masonry elements in layout drawings.

Ask

- Can you list some structural elements typically found in a masonry layout?
- Why is it important to differentiate between load-bearing and partition walls?

Explain

Understanding masonry components such as load-bearing walls, columns, and lintels helps draughtspersons ensure their interior layouts are technically accurate. For example, a furniture layout must not obstruct a shaft wall or remove a structural column. Different hatchings, tags, and notations are used in drawings to represent these elements accurately.

Debrief:
Recognizing masonry features ensures design compatibility and avoids structural conflicts in execution.

- Show annotated site layout diagrams.
- Use overlays or transparencies to differentiate wall types.
- Discuss challenges faced when site layouts do not match actual masonry elements.

Say

When transporting materials on-site, proper equipment and instructions are essential. Let us explore how to use an instruction sheet to identify the correct handling tools for different materials.

Ask

- What kind of equipment would you use to move large glass panels?
- Why is it important to check the transport path before selecting material handling tools?

Explain

An instruction sheet contains key details like material size, fragility, handling precautions, and the recommended equipment (e.g., panel trolley, suction clamps). It helps ensure safe, efficient movement of materials from the unloading area to the point of installation. Following it avoids damage, injury, and delays.

Do

Activity: Equipment Identification Challenge

- Provide mock instruction sheets.
- Ask participants to suggest suitable handling tools and explain their reasoning.

Debrief:
Correct use of material handling equipment protects materials and workers while improving site efficiency.

- Display real or mock tools like tile lifters, suction pads, or edge guards.
- Show sample instruction sheets from live projects.
- Encourage teams to prepare a sample instruction sheet based on a given material type.

Sample Practical Hands-On Activity

Title: Plan a Recce Toolkit Based on Job Work
Job Work Specifications Identified:

- Custom wardrobe for a master bedroom
- Sliding shutters with internal organizers
- Alignment required with existing window
- Possible electrical plug point inside the wardrobe

Checklist of Tools, Materials, and Equipment

Item	Purpose / Justification
Measuring Tape (5m or 10m)	To measure wall-to-wall distance, wardrobe height, and clearance from the window
Laser Distance Meter	For precise measurement of height and depth in tight spaces
Notebook / Sketchpad	To record all dimensions, notes, and site observations
Pencil, Scale, Eraser	For on-spot sketching of the layout and elevations
Camera / Smartphone	To take photos of the site, window placement, plug point, and wall finish
Finish Samples (Laminates/Veneers)	To match with client preferences and existing interior elements
Electrical Point Checklist	To confirm position and type of electrical plug near or within the wardrobe area
Flashlight / Torch	To check corners or darker zones, especially if natural light is insufficient
Client Requirement Sheet	To confirm functional and aesthetic expectations for wardrobe design
PPE (if required)	For safety if the site is under construction

UNIT 3.4: Site Documentation and Technical Recording

Unit Objectives

At the end of this unit, the participants will be able to:

1. Explain the process of site photography and videography based on different worksite specifications.
2. Discuss various technical considerations during site photography and videography.
3. Analyse the worksite and employ suitable methods to document the existing site conditions.
4. Plan the site survey in line with project layouts.
5. Identify suitable methods to document the existing site conditions at the worksite.
6. Identify suitable tools and equipment to document the worksite in the form of photos and videos in a commercial project.
7. Explain how to prepare the measurement sheet in line with the recce conducted for various interior designing projects - Residential and kitchen, Hospitality, Commercial, Academic institution, and Retail fit-out and exhibitions projects.

Say

Effective site documentation is essential for interior design execution. It ensures all design decisions are based on accurate, verified site data. Today, we'll explore the various forms of documentation used during and after a site recce.

Ask

- What kinds of documentation do you think are important after a site visit?
- How can photographic records support your design process?

Explain

Site documentation includes checklists, measurement sheets, photographs, observation notes, recce reports, client acknowledgments, and updated floor plans. These records ensure that the design aligns with actual site conditions, helping to avoid costly revisions, miscommunication, or execution delays. They also improve client communication and approval cycles.

Debrief

Accurate documentation helps translate site realities into precise design outputs and supports collaboration with teams and clients.

- Display filled samples of recce checklist and measurement sheets.
- Use real site photos to show what should be captured.
- Discuss common documentation mistakes and their project impact.

Conducting a site survey or recce is a vital step before starting interior design work. It allows us to assess the site's condition and align the proposed design with real-world constraints.

Ask

- What do you think needs to be done before visiting the site?
- Who usually accompanies the design team for a recce?

Notes for Facilitation

The recce process involves pre-survey preparation, permissions, on-site assessment, coordination with client POCs, and post-survey reporting. Tools like laser measures, checklists, and site plans are essential. Survey findings are documented in a recce report and shared with the design team. For complex projects, civil engineers or consultants may also be involved. This process ensures feasibility, helps finalize scope, and prevents design clashes with site realities.

Debrief

A well-executed site survey helps prevent design errors, builds client trust, and ensures alignment between concept and construction.

- Provide SOP handouts or flowcharts.
- Share real project case studies involving recce complications.
- Encourage participants to prepare a checklist based on different project types (residential, commercial, etc.).

Solution to Exercise

A. Multiple Choice Questions (MCQs)

1. Which of the following is not a common kitchen layout?
b. Spiral

2. What is a key reason for conducting a recce before project execution?
b. Checking actual site conditions

3. Which symbol in a site layout represents a masonry wall?
a. Crosshatch pattern

4. What does the instruction sheet primarily specify?
c. Operating and handling details of materials/tools

5. You are working on a commercial office interior site. A large quantity of glass partitions and plywood sheets needs to be moved from the delivery point to the 3rd floor where installation will happen. What is the most appropriate equipment to ensure safe and efficient handling?
c. Trolley with platform and goods lift

Instructions for Conducting Activity : Field Visit

1. Pre-Visit Preparation

- Form groups of 3–4 participants.
- Review the sample Site Condition Checklist provided by your trainer.
- Gather and carry the following essential items:
    - Smartphone or digital camera
    - Measuring tape or laser distance meter
    - Notepad and pen
    - Floor plan printout (if available)
    - Video recording device or mobile phone
    - PPE (helmet, safety shoes) if required for site access

2. On-Site Activity Tasks

A. Observation

- Visit the assigned commercial site (e.g., office, retail store, or showroom).
- Observe and note:
    - Type and condition of floor, wall, and ceiling finishes
    - Locations of columns, beams, and partitions
    - Position of lighting and ventilation points
    - Presence of furniture, fixtures, and built-in fittings
    - Locations of plumbing and electrical points

B. Documentation

- Capture at least 5 labelled photographs highlighting different site features.
- Record a 30–60 second video walkthrough covering major areas like reception, workstations, and pantry.
- Take quick measurements of select elements such as room width, door height, or window size.
- Mark damaged or obstructed areas on the provided floor plan or sketch.

C. Record Observations

- Complete the Site Observation Sheet with:
    - Date and time of visit
    - Names of team members
    - Tools and devices used
    - Key observations
    - Any safety, access, or environmental concerns

3. Post-Visit Tasks

- Back in class:
    - Share your group's photographs and video footage
    - Submit the completed Observation Sheet
    - Participate in a discussion on how this documentation supports interior layout planning and technical drafting

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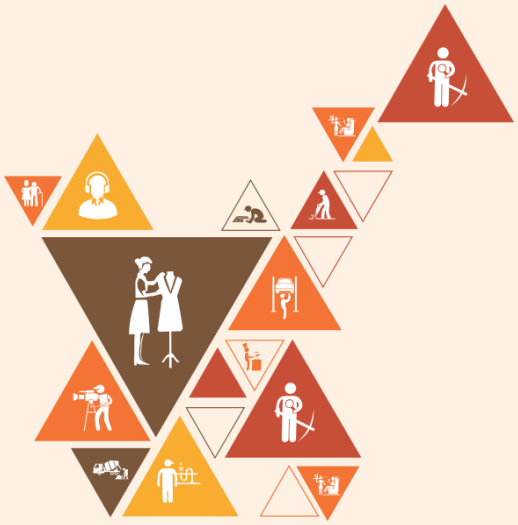
4. Site Measurements and Supervision

Unit 4.1: Measuring Principles and Tools

Unit 4.2: Practical Measurement and Sheet Preparation



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Key Learning Outcomes

At the end of this module, the participants will be able to:

1. Discuss the importance of mathematics and geometry skills in performing measurement and marking activities.
2. Explain various techniques and tools associated with measurement activities.
3. Explain the various techniques associated with designing a layout.
4. Apply the basic measurement techniques to measure the worksite.
5. Demonstrate the process of marking the worksite as per the layout and plan.
6. Prepare the measurement sheet in line with the recce conducted.
7. Demonstrate how to prepare the measurement sheet for various interior designing projects - Residential and kitchen projects, Hospitality projects, Commercial projects, Academic institution projects, Retail fit-out and exhibitions projects.

UNIT 4.1: Measurement Principles and Tools

Unit Objectives

At the end of this unit, the participants will be able to:

1. Discuss the importance of mathematics and geometry skills in performing measurement and marking activities.
2. Explain various techniques and tools associated with measurement activities.
3. Explain the various techniques associated with designing a layout.

Resources to be Used

Participant handbook, Whiteboard, Projector, Sample room layouts with dimensions for area, perimeter, and volume calculation, Unit conversion charts, measuring tools (Measuring tape, Laser distance meter, Scale ruler, Protractor and set square), Levelling tools (spirit level, plumb bob, laser level), Markers, pencils.

Say

Interior design involves more than creativity—it requires mathematical precision. In this unit, we will focus on the key measurement, geometry, and calculation skills every draughtsperson must use on-site and during drafting.

Ask

- Why is it important to know how to calculate area, volume, and perimeter in interior design?
- Can you share where you have used geometry or scaling in a real or classroom project?

Explain

Measurement principles form the base for all drafting and layout decisions. Draughtspersons must know how to calculate dimensions, convert between units, and use area, volume, and perimeter formulas for planning and procurement. Additionally, understanding scale and angle measurement ensures that the site design is accurately represented and executed. Geometry supports layout accuracy, material estimation, and proportional design.

Do

- Provide practice tasks with sample room sizes for participants to calculate area, perimeter, and volume.
- Include questions that involve scale conversions (e.g., 1:100) and geometry identification.

Debrief

Strong command of measurement and geometry allows draughtspersons to plan efficiently, minimize errors, and ensure compatibility between design and site.

Notes for Facilitation

- Use real room dimension examples.
- Provide different shaped cut-outs (square, rectangle, triangle, etc.) for geometry practice.
-
- Accuracy is non-negotiable in interior projects. In this unit, we will learn about essential measurement techniques and tools used for taking precise dimensions and documenting them effectively.

You may ask them

- What measuring tools have you used during class or site visits?
- Why is it important to cross-verify dimensions on-site?

Manual and digital tools, such as laser measurers, spirit levels, and protractors, ensure accurate measurement and layout planning. Techniques like diagonal measurement, grid marking, and level checking help confirm alignment, angles, and space utilization. Draughtspersons should also be familiar with documentation tools such as graph paper, digital tablets, and camera-based records for comprehensive site documentation.

Do

- Display a set of tools (measuring tape, laser measurer, plumb bob, level).
- Let participants practice measuring, checking alignment, and marking values.
- Ask participants to sketch simple layouts based on their measurements.

Debrief

Correct use of tools and documentation techniques reduces onsite rework and supports better design outcomes.

Notes for Facilitation

- Use real-life examples and site-based scenarios wherever possible.
- Encourage hands-on use of tools and measurement instruments in pairs or small groups.
- Incorporate both manual and digital methods to give exposure to current industry practices.
- Provide checklists or reference templates to support guided activities.
- Allow participants to present their observations and calculations to build confidence and communication skills.

UNIT 4.2: Practical Measurement and Sheet Preparation

Unit Objectives

At the end of this unit, the participants will be able to:

1. Describe how to apply the basic measurement techniques to measure the worksite.
2. Explain the process of marking the worksite as per the layout and plan.
3. Prepare the measurement sheet in line with the recce conducted.
4. Explain how to prepare the measurement sheet for various interior designing projects - Residential and kitchen projects, Hospitality projects, Commercial projects, Academic institution projects, Retail fit-out and exhibitions projects.

Say

Accurate site measurement is the foundation for every interior layout. In this session, we'll learn how to apply measurement techniques systematically to capture real site dimensions.

Ask

- What are some common challenges you face while measuring a site?
- Why is it important to check diagonals or ceiling levels?

Explain

Basic measurement techniques involve a step-by-step method: starting with a walkthrough, setting reference points, using the right tools, and recording values. Draughtspersons must take note of openings, structural elements, and services such as plumbing or electrical lines. Tools like measuring tape, laser meters, and levels ensure precision, especially in tight or irregular spaces.

Debrief:
Careful site measurement minimizes rework and improves coordination between design and execution teams.

- Use classroom props or furniture setups for simulation.
- Demonstrate how to mark dimensions on sketch paper.
- Reinforce cross-verification using diagonal checks.

After measurements and layout planning, translating the drawing onto the site is a critical step. Let us understand how draughtspersons mark the worksite as per the plan.

Ask

- Have you seen a site where floor or wall markings were visible before construction?
- What could happen if marking is inaccurate?

Explain

Worksite marking ensures that carpenters, electricians, and installers follow exact placement of elements. It includes using chalk lines, markers, and laser levels to draw out furniture, partitions, and service points on-site. This step bridges the gap between design and physical space.

Debrief:
Marking ensures everyone at the site follows a common reference and avoids misalignment or clashes.

- Use sample photos or videos to visually demonstrate site marking and documentation practices.
- Highlight the importance of accuracy, legibility, and cross-verification during marking exercises.
- Measurement and marking needs vary across project types. Let's explore how these tasks are tailored for residential, hospitality, commercial, academic, and retail projects.

Ask

- How would measurement in a kitchen differ from that in an office?
- Why is it important to adjust marking techniques based on the space use?

Explain

Each project type has unique layout needs. For example, residential kitchens require precise marking of cabinets and plumbing points. In hospitality, maintaining standard bed and lighting positions is key. Commercial spaces require coordination with HVAC and electrical systems. Understanding these differences ensures site readiness and functional execution.

Do

- Divide the class into groups and assign one project type.
- Each group prepares a mock marking plan for their assigned sector using a layout sketch.

Debrief

Adapting techniques as per project type ensures designs are practically implementable and space-appropriate.

- Present real-life case studies or sector-specific project examples to contextualize learning.
- Facilitate group discussions where participants explain and justify design decisions based on project function and space usage.
- Encourage comparison between project types (e.g., residential vs. commercial) to highlight functional priorities.
- Provide templates or examples to guide participants in developing layout justifications.

Solution to Exercises

Multiple Choice Questions (MCQs)

Q1. What is the formula used to calculate the area of a rectangular room?
b. Area = Length × Breadth

Q2. In interior drawings, what does a 1:100 scale mean?
b. 1 cm on paper = 100 cm on site

Q3. Which tool is best suited for long-distance, accurate interior measurements?
c. Laser distance meter

Q4. The Pythagorean Theorem is used to:
b. Verify square corners using diagonal checks

Q5. Which of the following shapes is most suitable for designing a bay window seating unit?
c. Trapezoid

Sample Solution for Activity: Prepare the Measurement Sheet in Line with the Recce Conducted

Sample Measurement Sheet

Project Type: Residential Living Room
Date of Recce: 11 July 2025
Measured By: Learner Group 2

S. No.	Area/Element Measured	Measurement (L × B × H)	Unit	Notes/Observations
1	Living Room Wall A	5.2m × 0.2m × 2.7m	m	Wall has switch panel near midpoint
2	Living Room Wall B	3.5m × 0.2m × 2.7m	m	No openings; suitable for TV unit
3	Window – East Wall	1.5m × 1.2m	m	Sliding aluminum frame; grilled
4	Main Door	0.9m × 2.1m	m	Opens inward; wooden flush door
5	Ceiling Height	2.7m	m	Consistent height; no false ceiling
6	Beam Offset – West	0.3m drop from ceiling	m	Beam visible on west wall
7	Niche (for storage)	1.0m × 0.45m × 2.0m	m	Recessed niche between two columns
8	Floor Area (approx.)	5.2m × 3.5m	m^2	Total usable area ≈ 18.2 m^2

Observations:

- One beam drop noted along west wall
- Wall A suitable for furniture installation
- Natural light from east-facing window
- No visible dampness or floor damage

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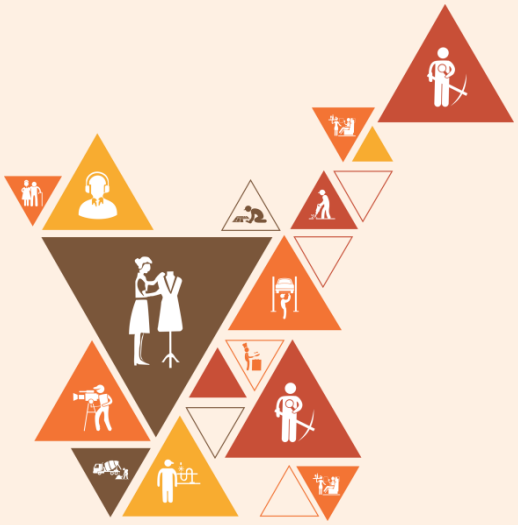
5. Drafting for Interior Projects

Unit 5.1: MEP Coordination and Integration in Interior Design

Unit 5.2: Design Foundations, Layout Planning, and Ergonomics

Unit 5.3: Digital Drafting and Drawing Execution



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Key Learning Outcomes

At the end of this module, the participants will be able to:

1. Explain the roles of various Mechanical, Electrical, and Plumbing (MEP) at the site affecting the product detailing.
2. Identify the key MEP requirements to be considered while drafting various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.
3. Explain how to interpret MEP details based on drawing specifications.
4. State the significance of rough sketches in the designing process.
5. Discuss various techniques associated with the layout preparation.
6. Discuss various technical considerations and detailing during product/layout designing.
7. State the role of aesthetics and ergonomics in product design.
8. Identify and employ suitable 2D/3D software and techniques to prepare design drafts/drawings/layouts.
9. Explain how to create layouts and drawings as per the site survey/recce for various interior design projects.
10. Explain how to modify architectural drawings for interior design purposes.

UNIT 5.1: MEP Coordination and Integration in Interior Design

Unit Objectives

At the end of this unit, the participants will be able to:

1. Explain the roles of various Mechanical, Electrical, and Plumbing (MEP) at the site affecting the product detailing.
2. Identify the key MEP requirements to be considered while drafting various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.
3. Explain how to interpret MEP details based on drawing specifications.

Resources to be Used

Participant Handbook, Whiteboard, Marker, Projector, Sample layout plans for residential, commercial, and hospitality interiors, MEP overlay drawings (HVAC, plumbing, electrical)

Say

Interior design is not complete without integrating key service systems. In this unit, we will understand the roles of Mechanical, Electrical, and Plumbing (MEP) elements across different interior projects.

Ask

- What are some visible MEP components in a hotel room or a kitchen?
- Why is it important to coordinate furniture layout with MEP systems?

Explain

MEP systems such as HVAC ducts, electrical switchboards, and plumbing lines are the backbone of interior spaces. Each project type (residential, commercial, retail, etc.) has unique MEP demands that impact ceiling heights, furniture positioning, lighting design, and plumbing zones. Coordination helps avoid clashes (e.g., a beam blocking ducting) and ensures safety and aesthetics are not compromised.

Do

- Share images from 2–3 different project types.
- Ask participants to spot and label HVAC vents, wiring zones, and plumbing fixtures on copies of layouts.

Debrief

Early awareness of MEP roles helps draughtspersons plan smarter, prevent rework, and contribute to efficient site execution.

- Display photos of MEP integration in kitchens, offices, and stores.
- Use sample ducting/electrical layout overlays on furniture plans.
- Emphasize real-life misalignment cases and solutions.
- Encourage the participants to visit the external link provided in the PH.

Understanding MEP needs while drafting ensures that design is not just beautiful, but also functional and buildable. Let us explore what should be considered for different types of interior spaces.

Each space from homes to retail stores has different service expectations. Kitchens need concealed pipelines and sufficient sockets. Offices need structured cabling and HVAC zoning. Draughtspersons must plan for power loading, vent and duct routing, space for maintenance, and ensure compliance with fire safety norms. Drafting must align with civil and MEP layouts to avoid later conflicts.

Debrief

Well-thought MEP inclusion in drawings makes projects practical, compliant, and faster to execute.

Notes for Facilitation

- Encourage participants to apply concepts by marking layouts or sketching routes using templates.
- Facilitate discussions around observed challenges and encourage collaborative problem-solving.
- Reinforce industry standards and real-site constraints through examples.

Sample Solution for Activity: Interpreting MEP Details from Drawing Specifications

Group Name: Team A – Residential Kitchen
Drawing Type: Residential Kitchen Layout
MEP Elements Identified:

- Cold water inlet and hot water outlet
- Gas pipeline to hob
- Power outlet for refrigerator, microwave, chimney
- Waste water outlet
- Exhaust fan placement

Sample Symbols Decoded

- Blue arrow = Cold water supply
- Red arrow = Hot water line
- Dashed yellow line = Electrical conduit
- Square box = Switchboard
- Circle with G = Gas point

Service Routes Interpreted

- Water lines run along the back wall under the counter
- Gas pipeline concealed above base cabinets
- Electrical conduits routed through wall chase to switchboard near door

Utility Areas Located:

- Utility shaft adjacent to sink area
- Switchboard mounted at 4 ft height from floor

Impact on Design Detailing:

- Base cabinet cut-outs required for sink and gas line
- False paneling planned to conceal electrical conduits
- Power socket placements aligned with appliance zones

Group Name: Team B – Commercial Office Plan
Drawing Type: Commercial Office Layout
MEP Elements Identified:

- HVAC ductwork above ceiling
- Lighting layout with circuiting
- LAN cabling for workstations
- Fire alarm sensors near exit corridors

Sample Symbols Decoded:

- Rectangular block = Diffuser
- Circle with F = Fire sensor
- Solid line = Electrical wiring
- Zigzag line = LAN cable

Observations:

- HVAC ducts interfere with planned ceiling lights; must revise lighting points
- Workstations must align with LAN points for minimal wiring exposure
- Furniture layout adjusted to avoid fire sensor obstruction

UNIT 5.2: Design Foundations, Layout Planning, Material and Ergonomics

Unit Objectives

At the end of this unit, the participants will be able to:

1. State the significance of rough sketches in the designing process.
2. Discuss various techniques associated with the layout preparation.
3. Discuss various technical considerations and detailing during product/layout designing.
4. State the role of aesthetics and ergonomics in product design.
5. List various types of raw materials used in interior design projects.
6. Discuss various types of materials, tools, and equipment required in product design and fabrication.

Say

Every great design starts with a rough sketch. In this unit, we will explore how quick freehand drawings help convert ideas into visuals before moving to detailed technical drawings.

Ask

- Why do designers prefer sketching before software-based design?
- What can you capture through rough sketches that CAD might miss initially?

Explain

Rough sketches support early exploration of ideas, space planning, and creative brainstorming. They help communicate design intentions clearly in initial client discussions. Proportions, circulation flow, furniture fitment, and alignment can be tested visually before final drafting.

- Provide students with a basic room type (e.g., small office, hotel room).
- Ask them to sketch 2–3 layout options using rough freehand drawing.

Debrief

Rough sketches help clarify design thinking early in the process and save time by avoiding misaligned expectations later.

Notes for Facilitation

- Use drawing sheets and pencils for sketching activities.
- Show scanned examples of rough sketches used in real design projects.
- Encourage participants to explain their sketch logic.
- Layout preparation is the science of arranging spaces efficiently. Let us learn some proven techniques that professionals use to zone and plan interiors.

You may ask:

- What comes first: zoning or circulation?
- How does a bubble diagram help simplify planning?

Effective layout preparation uses zoning to separate functional spaces, circulation planning for easy movement, and tools like bubble diagrams and grid-based designs to visualize relationships and symmetry. Blocking and stacking help plan multilevel structures.

Debrief

Structured layout planning helps in modular design, better space utility, and reducing conflicts during execution.

- Provide printed examples of bubble diagrams and zoning sketches.
- Allow peer discussion on space utilisation logic.
- Use tracing paper overlays for stacking/blocking visualisation.

Great design also needs precision. Today, we will learn what goes into technical detailing to make a layout safe, durable, and practical.

You may ask them:

- Why is joinery detail important in cabinetry drawings?
- What is the role of material specifications in long-term performance?

Explain

Technical detailing involves dimensions, material specs, service coordination (MEP), hardware selection, and adherence to codes. Every joinery line or hardware spec affects cost, durability, and aesthetics. Codes ensure compliance with accessibility, fire safety, and local laws.

Do

- Provide a product sketch (e.g., kitchen cabinet).
- Ask participants to add dimensions, materials, and at least 3 joinery/hardware annotations.

Debrief:
Precise detailing improves quality, reduces ambiguity, and ensures designs are implementation-ready.

Notes for Facilitation

- Display real samples of detailed joinery/cabinet drawings.
- Provide symbol sheets for common hardware or IS codes.
- Encourage students to reference standard dimensions.
- Good design feels right and functions well. Let us explore how aesthetics and ergonomics work together to create balanced, user-friendly interiors.
- Aesthetics appeal to senses through colour, balance, textures, and style. Ergonomics ensures the design suits human movement, reach, and comfort. Together, they determine user satisfaction, safety, and productivity. Design without these considerations often fails practically.
- Share 2 contrasting images (ergonomic vs. non-ergonomic or aesthetic vs. cluttered design).
- Ask participants to discuss pros/cons based on visual appeal and usability.

Debrief
Designs should not only impress visually but also ensure ease of use and comfort for the intended audience.

- Use sector-specific examples like kitchens, classrooms, and cash counters.
- Provide a reference sheet for ergonomic dimensions.
- Encourage group discussions on visual balance and comfort.

UNIT 5.3: Digital Drafting and Drawing Execution

Unit Objectives

At the end of this unit, the participants will be able to:

1. Identify and employ suitable 2D/3D software and techniques to prepare design drafts/drawings/layouts.
2. Explain how to create layouts and drawings as per the site survey/recce for various interior design projects.
3. Explain how to modify architectural drawings for interior design purposes.

Say

Design software brings your ideas to life. This session introduces essential 2D and 3D tools used in the interior design industry to create layouts, visuals, and detailed models.

Ask

- Which drafting software have you heard of or used?
- Why might a designer choose SketchUp over AutoCAD or Revit?

Explain

AutoCAD is used for precise 2D technical drafting. SketchUp offers intuitive 3D modeling for spatial understanding. Revit is ideal for large-scale BIM-enabled design. 3ds Max and Lumion help create realistic renders and walkthroughs. Tool choice depends on project type—residential, commercial, or retail.

Debrief

Choosing the right software ensures faster turnaround, better clarity, and aligned outputs for various stakeholders.

Notes for Facilitation

- Show live demonstrations or video walkthroughs of software interfaces.
- Provide printed symbol references and shortcuts for common tools.
- Highlight pros and limitations of each software.

A recce gives you the facts. Turning that into a functional drawing is the draughtsperson' s key responsibility. Let us learn the steps.

You may ask them

- Why is it important to capture site conditions accurately in a drawing?
- What problems can occur if recce data is not correctly interpreted?

Post-recce, designers create base plans that reflect site dimensions, openings, obstructions, and structural conditions. The data is translated into scaled digital drawings, typically starting with a 2D AutoCAD draft. This ensures alignment of real-world constraints with design intent.

Activity: Draft from Recce Sheet

- Share a mock measurement sheet from a kitchen site.
- Ask participants to draft a basic layout using AutoCAD or SketchUp.

Debrief:
Recce-based drawing ensures realistic planning, speeds approvals, and avoids clashes at the execution stage.

- Provide digital files or measurement sheets for hands-on conversion.
- Guide on common symbols and layer usage for site drawings.
- Emphasize accuracy and dimensioning best practices.

Architectural drawings are just the base—interior detailing adds the real life. Learn how to modify those base files for your design vision.

You may ask them:

- What are some typical changes an interior designer might make to an architectural plan?
- Why is it important to maintain alignment with architectural structure?

Explain

Interior drawings often add furniture layouts, lighting plans, false ceiling designs, and material specifications. Draughtspersons must clean up base layers, overlay custom elements, and retain key references (columns, ducts, doors). Modifications must align with services, avoid structural changes, and maintain readability.

Debrief
Interior overlays enhance usability, reflect intent, and help other teams like MEP, civil, and vendors act on the design.

- Provide layered architectural drawings (DWG format if possible).
- Use colour coding for interior vs. architectural additions.
- Share a checklist for verifying coordination with base files.

Solution to Exercises

A. Multiple Choice Questions (MCQs)

1. What is the main role of plumbing in a modular kitchen interior design?
C. Water inlet and outlet alignment

2. Which technique is best for visualizing circulation flow before creating precise interior drafts?
B. Bubble diagrams

3. What software is typically used for creating detailed floor plans and elevations?
C. AutoCAD

4. In a hospitality project, what aesthetic design enhances relaxation for guests?
B. Earth-toned palettes with velvet sofas and ambient lighting

5. Why is it important to coordinate interior layouts with MEP drawings?
C. To prevent clashes in ducts, plumbing, and electrical routes

Sample Solution for Activity: Creating and Modifying Layouts Based on Site Survey and Architectural Drawings

Part A: Creating Layouts from Site Survey

Selected Project Type: Residential & Kitchen

Site Observation Notes:

- **Room Dimensions:** Kitchen – 12 ft × 10 ft × 9 ft
- **Doors/Windows:** 1 Main Door (3 ft width), 1 Window (4 ft × 3 ft)
- **Existing Services:** Water inlet near sink area, electrical socket for chimney and microwave
- **Obstructions:** Vertical column on east wall (1 ft × 1 ft), false ceiling beam 6 inches deep

Rough Sketch (on Graph Paper):

- Labeled zones: Sink area, cooking range, refrigerator, prep counter
- Services marked with standard symbols
- Proportions drawn to scale (1 square = 1 ft)
- Additional label: "Column – avoid cabinetry in this zone"

Digital Draft (AutoCAD):

- Drafted outer walls with 4.5" wall thickness
- Doors and windows inserted using blocks
- Service points plotted on separate layer
- Saved as: Site_Condition_Kitchen_Plan.dwg

Part B: Modifying Architectural Drawings for Interior Design

Base Drawing: 2BHK Apartment Plan (provided in .dwg)

Modifications:

- Added modular kitchen L-layout with overhead storage
- Shifted dining table closer to window for natural light
- Added a wardrobe and study unit in Bedroom 1
- Introduced false ceiling layout in living room

Layering Details:

- Existing elements = Black layer
- New partitions = Red layer
- Furniture = Blue layer
- Electrical points = Green layer
- Ceiling and lighting = Purple layer

Exported Final Layout:

- File Name: Modified_Interior_Layout_Plan.pdf
- Contains:
    - Legend for furniture and services
    - Annotations (e.g., “Added sliding wardrobe,” “False ceiling with cove light”)
    - Dimensions, scale bar, and directional arrow

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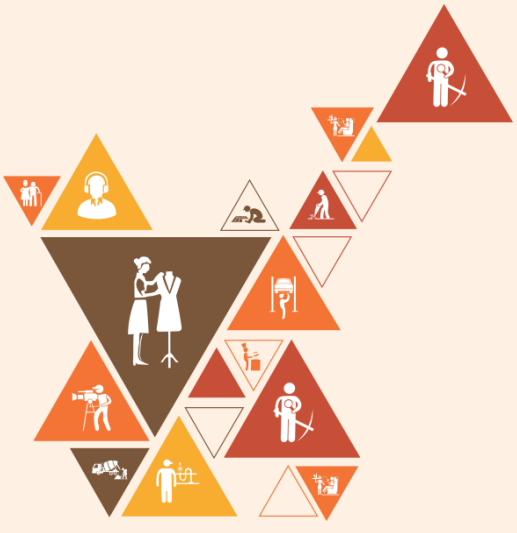
6. Mood Boards and 3D Modelling

Unit 6.1: Mood Board Fundamentals and Material Selection

Unit 6.2: Digital Visualization and 3D Design Tools

Unit 6.3: Furniture, Fixtures, and Equipment (FF&E) Selection



FFS/N0204, FFS/N0205,
FFS/N0206, FFS/N0207,
FFS/N0208, FFS/N0209

Key Learning Outcomes

At the end of this module, the participants will be able to:

1. Explain the various elements of a mood board.
2. Explain the various elements and the process of designing a mood board for various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.
3. Discuss various types of materials used in product finishing.
4. State the significance of various design specifications in the designing process.
5. Analyse the design specifications to identify the mood board layout.
6. Apply different materials in preparation for mood boards.
7. Explain the steps involved in preparing the mood boards.
8. Draft and review layouts for mood boards of different types of projects.
9. Describe the operational procedures for different types of 3D software and their significance in the process.
10. Identify the use of suitable designing software to create 3D renders/models.
11. Identify and employ suitable themes and styles for various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions – during the visualization process.
12. List various types of furniture and interior products/accessories used in residential and kitchen spaces for various interior designing projects.
13. Identify and select suitable Furniture, Fixtures, and Equipment (FF&E) based on client requirements for various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.

UNIT 6.1: Mood Board Fundamentals & Material Selection

Unit Objectives

At the end of this unit, the participants will be able to:

1. Explain the various elements of a mood board.
2. Explain the various elements and the process of designing a mood board for various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.
3. Discuss various types of materials used in product finishing.
4. State the significance of various design specifications in the designing process.
5. Analyse the design specifications to identify the mood board layout.
6. Apply different materials in preparation for mood boards.
7. Explain the steps involved in preparing the mood boards.
8. Draft and review layouts for mood boards of different types of projects.

Resources to be Used

Participant Handbook, Whiteboard, Projector, Sample mood boards, Fabric swatches, laminate samples, paint chips, texture boards, Digital tools: Canva, PowerPoint, Photoshop (basic level)

Say

Mood boards bring design concepts to life before anything is built. In this unit, we will explore how mood boards help express interior themes using visuals, colors, materials, and style references.

Explain

Mood boards visually communicate the look and feel of a design using collected samples—fabric swatches, flooring, furniture, lighting, and colour palettes. They help get team and client alignment early on. Both physical and digital versions are used, with tools like Canva and Photoshop. Mood boards also include annotation and layout planning.

Do

Activity: Build Your First Mood Board

- Participants select a room type (bedroom, lounge, café)
- Collect relevant materials (images, swatches, textures)
- Arrange into a physical or digital mood board

Debrief:
Mood boards bridge imagination and execution by aligning visual expectations before design implementation.

Notes for Facilitation

- Share sample boards from real projects (digital/print)
- Demonstrate Canva for beginners
- Highlight annotation, layout balance, and layering techniques
- Each type of interior project (home, office, hotel, or school)has unique needs. Let us explore how mood board elements change based on project type.

Ask

- What would you expect to see in a school library mood board?
- How does a restaurant mood board differ from a kitchen one?

Explain

Mood boards are customized as per project category:

- Residential & Kitchen: Warm colors, wood finishes, cozy textiles, decor items
- Hospitality: Luxe textures, elegant lighting, brand visuals
- Commercial: Muted palettes, modular furniture, acoustic panels
- Academic: Functional, age-friendly layouts, safe materials
- Retail/Exhibitions: Bold branding, modular display, high-impact lighting

The process remains common: Understand theme → Collect references → Organize → Annotate → Present.

Debrief

Understanding how materials and visuals vary by project type ensures functional and aesthetic accuracy in designs.

- Show real sector-wise mood board examples (residential vs. commercial)
- Use swatch kits and printouts where possible

UNIT 6.2: Digital Visualization and 3D Design Tools

Unit Objectives

At the end of this unit, the participants will be able to:

1. Describe the operational procedures for different types of 3D software and their significance in the process.
2. Identify the use of suitable designing software to create 3D renders/models.
3. Identify and employ suitable themes and styles for various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions - during the visualization process.

Guidelines for Hands-On Activity

Create a 3D Render for a Living Room Using SketchUp

Part 1: Modelling in SketchUp

1. Room Layout

- Dimensions: **5m (L) x 4m (W)**, height: **3m**
- Wall thickness: **0.15m**
- Door: **1.2m wide** (centered on short wall)
- Window: **1.5m wide** (centered on adjacent long wall at 1.1m height)

2. Furniture Modelling

Using SketchUp 3D Warehouse:

- **3-Seater Sofa**: Beige linen finish, placed facing the TV unit.
- **Armchair**: Positioned at an angle beside the sofa.
- **Coffee Table**: Low, circular wood-finish table placed centrally.
- **TV Unit**: Sleek white wall-mounted cabinet with shelf above.
- **Additional Items**:
    - Floor Lamp beside the armchair
    - Jute rug under the coffee table
    - Potted indoor plant near window
    - Optional: Feature wall with geometric artwork

3. Materials and Textures

- **Flooring**: Light oak wood
- **Wall Paint**: Matte white with olive green feature wall
- **Upholstery**: Light beige (sofa), moss green (armchair)
- **Tabletop**: Glossy walnut wood
- **Rug**: Woven jute texture

4. Lighting Setup

- **Natural Light**: Entering through window (sunlight turned ON in SketchUp)
- **Artificial Light**:
    - Pendant light centered over the coffee table
    - Floor lamp emitting warm light tone
    - Ambient light enabled in rendering settings

Part 2: Rendering in V-Ray

5. Camera Position

- **Viewpoint 1**: Diagonal corner view (from entrance) showing full layout.
- **Viewpoint 2**: Straight-on view facing the feature wall and TV unit.

6. Lighting Adjustments in V-Ray

- **Sunlight**: Medium intensity (sun angle adjusted for warm tones)
- **Ambient Light**: Enabled with soft fall-off
- **White Balance**: Warm preset
- **Render Quality**: Medium-High

7. Final Render Output

- File Format: **JPEG**
- Resolution: **1920x1080 px**
- Output Features:
    - Accurate shadows and natural reflections
    - Realistic surface textures (wood, fabric)
    - Crisp detailing of decor, lighting, and depth
    - Soft, warm ambiance matching modern style

Render Quality Checklist (✓ Done)

Criteria	Status
Accurate Room Dimensions	✓
Proper Furniture Placement	✓
Realistic Materials/Textures	✓
Balanced Natural + Artificial Light	✓
High-Resolution Render	✓

Visualizing Interior Design Concepts through Mood Boards, Miniatures, and 3D Renders

Part 1: Mood Board Creation

Client Brief:

- *Space Type*: Modern Living Room
- *Theme*: Calm, Minimalist, Earthy Tones
- *Palette*: Beige, White, Olive Green, Natural Wood

Mood Board Elements (Created on Canva):

Element	Details Included
Colour Palette	Beige, Olive Green, Off-white, Wood grain
Material Samples	Linen fabric, jute rug, matte wall finish, oak laminate flooring
Furniture Images	Low-profile beige sofa, green accent chair, round wood coffee table
Accessories	Indoor plants, abstract wall art, ceramic vases, black floor lamp
Styling	Throw cushions, terracotta planters, open wood shelf, minimal decor

Presentation:

- Arranged in a neat digital grid format using Canva
- Each item labelled (e.g., “Wall Finish,” “Accent Chair,” “Lighting Style”)
- Saved and printed for classroom display

Part 2: Miniature Model Making

Scale Used: 1:50
Actual Room Size: 5m x 4m
Model Size: 10cm x 8cm

Step	Description
Wall & Floor Layout	Cut from foam board using scaled printout of plan
Furniture Blocks	Created using coloured card paper for sofa, coffee table, and chair
Detailing Added	Wall textures simulated with paper; jute-texture for rug
Additional Props	Small paper lamp, green patch for plant, printed artwork pasted on wall
Labels	Zones like “Seating Area,” “TV Unit,” and “Feature Wall” marked

Presentation:

- Placed on a cardboard base with name tag
- Legend attached with a miniature photo reference

Part 3: 3D Rendering

Software Used: SketchUp + V-Ray
Steps Taken:

Step	Action Performed
Model Built	5m x 4m room, 3m height, with door and window openings
Furniture Added	Sofa, chair, TV unit, coffee table, rug, floor lamp, and indoor plant
Materials Applied	Wood floor, matte white/green walls, linen for furniture, jute rug texture
Lighting Setup	Daylight from window + pendant light and floor lamp
Camera Angles	1 corner view (wide shot), 1 straight-on view (TV wall and seating focus)
Rendered Output	JPEG images, 1920x1080 px resolution

Render Quality:

- Photorealistic finish with proper shadows, textures, and warm tones
- Final output ready for client presentation or peer review

Deliverables Submitted

- Digital Mood Board (PDF and printed)
- Physical Miniature Model with photo documentation
- Two Rendered Images (attached in assignment folder)

UNIT 6.3: Furniture, Fixtures, and Equipment (FF&E) Selection

Unit Objectives

At the end of this unit, the participants will be able to:

1. List various types of furniture and interior products/accessories used in residential and kitchen spaces for various interior designing projects.
2. Identify and select suitable Furniture, Fixtures, and Equipment (FF&E) based on client requirements for various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.

Say

Furniture and accessories bring functionality and personality to any interior space. In this session, we will explore commonly used furniture and interior products in residential and kitchen design projects.

Ask

- Can you list items found in a typical Indian living room or kitchen?
- How might furniture choices differ for a single professional versus a family with kids?

Explain

FF&E items include movable or fixed furniture (sofas, beds, wardrobes), fixtures (lamps, cabinets), and equipment (appliances, fittings). Each space—living, bedroom, dining, or kitchen—has specific product needs. Selections depend on layout, lifestyle, budget, and aesthetics.

Case Example: In the case study, Neha listed FF&E room-wise for a 3BHK flat and kitchen, covering everything from a nesting coffee table to under-sink waste cabinets and spice racks. This comprehensive listing helped align execution with the design brief.

Do

Activity: Product Mapping

- Provide floor plans of a sample 2BHK unit
- Ask participants to list essential FF&E by room type

Debrief

Understanding furniture types by space enables accurate planning and better communication with clients and vendors.

- Bring actual material samples (laminates, fabrics)
- Display catalogues from furniture vendors
- Use swatch boards and cut-out collages

Clients may not know technical terms—but they know what they want. This session focuses on choosing FF&E that fits client needs and site conditions.

You may ask them:

- What factors would you check before suggesting a dining table?
- How do budget and user lifestyle affect your selection?

FF&E selection involves balancing client preferences with technical constraints like space, durability, maintenance, and safety. Design intent, child-friendliness, finishes, and cost are also considered. Annotated layouts, item codes, and vendor lists make execution smoother.

Case Example: Neha's decisions included:

- Choosing plywood-laminate wardrobes for durability and cost-efficiency.
- Recommending foldable tables in small kitchens.
- Suggesting moisture-resistant pre-laminated boards in wet areas. She also created detailed FF&E files, marked layouts, and coordinated procurement. Her choices aligned aesthetics with function while keeping vendor readiness in mind.

Debrief:

Matching FF&E to real-life needs builds design relevance and smooth project execution.

- Share editable FF&E templates
- Display sample annotated layouts
- Encourage peer reviews of selections

Solution to Exercises

A. Multiple Choice Questions (MCQs)

1. Neha, a draughtsperson, is preparing a mood board for a school library. Which elements should she prioritize?
b) Anti-skid flooring, modular bookshelves, and spotlight reading zones

2. During a client presentation, the team uses a 3D render created in SketchUp with V-Ray. What is the main benefit of this?
b) It allows the client to see the final space visually before execution

3. For a retail fit-out mood board, which feature is most critical to include?
c) Brand-aligned colors and display lighting samples

4. Which of the following best describes the role of miniatures in interior design?
c) Small-scale 3D printed models to visualize space and design

5. While selecting FF&E for a kitchen project, what factor should the draughtsperson prioritize?
c) Durability, moisture resistance, and space-saving features

Guidelines to Conduct Hands-On Activity: Prepare a Complete Visualization Set for a Chosen Interior Space

Step-by-Step Facilitation Plan

1. Preparation (Before Class)

- Arrange digital access (laptops/tablets) with Canva or SketchUp.
- Provide art materials: foam boards, card sheets, scissors, glue, markers, swatches.
- Share a sample brief (e.g., café, reading room, studio flat).

2. Introduction (10 minutes)

- Briefly explain the importance of visualization tools in client communication.
- Show sample outputs of mood boards, miniatures, and 3D renders.
- Clarify the goal: Create a cohesive design narrative across all 3 tools.

3. Activity Execution (60–90 minutes)

Task	Materials Required	Notes
Create Mood Board	Canva, printouts, swatches, chart paper	Focus on theme, colour harmony, annotations
Build Miniature (1:50)	Foam/card sheet, glue, scale ruler	Reinforce proportion, placement, zones
Develop 3D Render	SketchUp, Revit, or planner5d	Encourage real-scale modeling & lighting

- Divide participants into pairs or small groups.
- Assign interior space types (bedroom, study nook, café corner, etc.).
- Encourage rough planning before starting final output.

4. Presentation & Review (30 minutes)

- Each team presents:
  - Mood board elements & inspiration
  - Miniature walk-through
  - 3D render features
- Peer-to-peer feedback encouraged.
- Ask them to justify design alignment with user/client brief.

Tips for Trainers

- Emphasize how each component supports the other (mood → model → render).
- Allow flexibility in tools (physical/digital) depending on learner access.
- Use guiding questions:
  - "Why this material/texture?"
  - "How does the miniature reflect zoning?"
  - "Is your render scaled accurately?"

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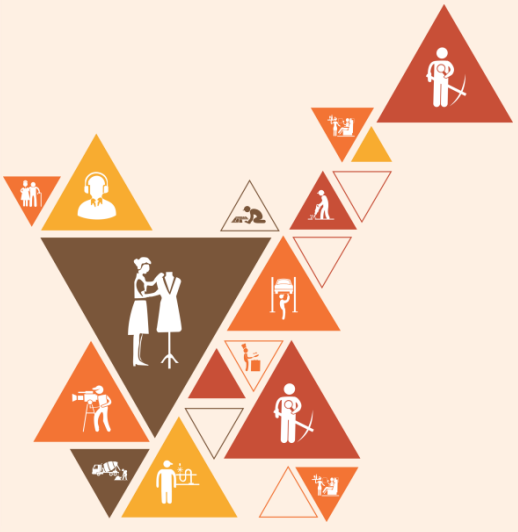
7. 2D and 3D Drawings for Various Interior Design Projects

Unit 7.1: Conceptual Drawing and Site-Specific Factors

Unit 7.2: Drafting Techniques and Layout Planning



FFS/N0204, FFS/N0205,
FFS/N0206, FFS/N0207,
FFS/N0208, FFS/N0209

Key Learning Outcomes

At the end of this module, the participants will be able to:

1. Discuss the key elements to consider for preparing rough sketches of various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.
2. Explain various practical, technical, functional, and legal factors associated with various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.
3. Discuss the effects of sunlight and other environmental factors affecting space planning for various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.
4. Identify suitable techniques to prepare design drafts of various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.
5. Explain how to design layout based on design specifications.

UNIT 7.1: Conceptual Drawing and Site-Specific Factors

Unit Objectives

At the end of this unit, the participants will be able to:

1. Discuss the key elements to consider for preparing rough sketches of various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.
2. Explain various practical, technical, functional, and legal factors associated with various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.
3. Discuss the effects of sunlight and other environmental factors affecting space planning for various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.

Resources to be Used

Participant handbook, Whiteboard, Markers, Projector, Sketch sheets, pencils, rulers, markers, Sample project briefs (residential, commercial, retail), Reference sketches and zoning examples

Say

In this unit, we will explore how to prepare rough sketches for different types of interior projects. These early-stage visuals help communicate zoning, layout ideas, and furniture placement before detailed CAD drawings are made.

Explain

Rough sketches should reflect the function, client needs, and layout zoning. For example, in a residential project, distinguishing between private and public areas is key. In a retail kiosk, visibility and flow matter more. Participants should consider dimensions, circulation, furniture placement, lighting sources, and services like electrical and plumbing. These sketches should be flexible for iteration.

Activity – Create Rough Sketches

- Provide 3 different project briefs (e.g., 2BHK flat, boutique hotel, retail kiosk).
- Ask participants to prepare quick hand sketches highlighting zones, furniture, light sources, entry/exit points.

Debrief:
Compare sketches and discuss how different considerations apply to different projects. Encourage peer feedback on circulation and layout efficiency.

- Show printed sketch samples for each project type.
- Reinforce the idea that rough sketches are for **thinking, not precision**.
- Share a checklist: purpose, zoning, furniture, services, natural light.

Every design decision must balance real-life site conditions, structural needs, legal compliance, and user function. Let us break down these four dimensions for different project types.

Ask

- Can a design look beautiful but fail in usability or compliance?
- What practical issues can arise if legal codes are ignored?

Explain

Each project type (residential, commercial, retail) involves:

- **Practical factors** like site conditions, local climate, user needs.
- **Technical aspects** like MEP, software precision, material specs.
- **Functional needs** such as zoning, flexibility, and ergonomics.
- **Legal rules** like building codes, fire safety, and accessibility norms.

Use case examples:

- In a school, child-safe furniture and ramp access are legal + functional requirements.
- In a hotel, soundproofing (practical) and HVAC coordination (technical) must be considered.
- Distribute example scenarios (e.g., kitchen design, retail outlet, school classroom).
- Ask participants to map challenges under practical/technical/functional/legal categories.

Debrief
Reinforce that neglecting any one factor leads to project failure—design success lies in integration.

Notes for Facilitation

- Use printed charts or Venn diagrams to map factors.
- Discuss real case mishaps where neglect led to rework or violations.
- Provide summary cards listing factor types and project-specific examples.

Let us understand how environmental factors like sunlight, wind, and climate affect interior planning. These natural elements influence comfort, material choice, and layout.

You may ask them:

- Why should we place workspaces near windows?
- Can ventilation planning reduce energy bills?

Sunlight impacts room orientation, natural lighting, and even finishes (e.g., UV-safe laminates). Ventilation affects air quality and layout design. Rainfall and humidity demand moisture-resistant materials, especially in kitchens and bathrooms. For example, in coastal areas, shaded verandas and high ceilings improve comfort in hospitality spaces.

Environmental Zoning Sketch

- Provide project briefs with climate info (hot/humid, cold, coastal).
- Ask participants to sketch space zoning and indicate where sunlight, wind, or rainfall impact layout/material decisions.

Debrief

Discuss how environmental awareness leads to healthier, more sustainable interiors.

- Use compass-based site orientation diagrams.
- Share photos of good/bad daylight use, ventilation, or moisture handling.
- Encourage participants to reflect on their own local climate in design.

UNIT 7.2: Drafting Techniques and Layout Planning

Unit Objectives

At the end of this unit, the participants will be able to:

1. Identify suitable techniques to prepare design drafts of various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.
2. Explain how to design layout based on design specifications.

Say

In this unit, we will explore how to select appropriate drafting techniques and apply effective layout planning strategies across various interior design project types. Each project presents unique requirements, and a one-size-fits-all approach is not suitable. Let us understand how professionals customise their methods to meet diverse functional and design objectives for various interior designing projects.

Ask

- Why might you use a different drafting approach for a hotel lobby compared to a classroom?
- What makes a layout functional and easy to execute?

Explain

The case study of Priya, a draughtsperson, demonstrates how layout planning and drafting vary across project types:

- For a 2BHK residence, she used hand sketches and AutoCAD for quick visualization and modular kitchen detailing.
- In hospitality, a zoning diagram and 3D renders helped show circulation and material finishes.
- A commercial office required AutoCAD modular layouts and layered MEP drawings to address HVAC and desk spacing.
- An academic block needed functional layouts and reflected ceiling plans (RCP) to ensure proper furniture, lighting, and electrical provisions.

- For retail/exhibition design, she prioritized customer flow sketches and fixture placement plans, focusing on branding and lighting zones.

Priya tailored techniques based on project goals, spatial requirements, software familiarity, and execution needs.

This approach ensured that each layout:

- Mapped zones and movement efficiently
- Integrated furniture, lighting, and services
- Followed client briefs and code standards

Debrief

By understanding how drafting techniques and layout planning vary across project types, participants can select the most appropriate tools and approaches for each scenario. This ensures that the final designs are not only visually appealing but also functionally sound and execution-ready. Strong layout logic and the right drafting techniques contribute to better coordination with teams and successful project outcomes.

Notes for Facilitation

- Share real samples of multi-sector layout drawings (e.g., RCPs, zoning plans, modular layouts).
- Emphasize how layout logic should align with end-user needs, not just aesthetics.
- Encourage group comparisons of drafting approaches across sectors.
- Provide quick reference charts linking project types with preferred drafting techniques/tools.

Sample Solution for Hands-On Activity: Prepare a Conceptual Layout Draft for a Multipurpose Room

Selected Context: Hospitality – Waiting Lounge

Conceptual Layout (Sketch Overview):

A 6m x 6m lounge space designed to provide comfort, flow, and aesthetic appeal.

Key zones marked:

- Entry (with welcome signage)
- Reception counter (1.2m wide) near entrance
- Waiting area with 2 sofas (2m each), coffee table in center
- Magazine rack and water dispenser in rear corner
- Lighting: overhead LED panels and natural light from one window (west wall)
- Circulation path: 1.2m wide from entry to sofas and rear wall

Annotations Used:

- Sofa symbol with dimensions
- Arrows for circulation
- Light source icons
- Zoning labels: “Seating”, “Reception”, “Utilities”
- • Chose hand sketching for flexibility in zoning and quick ideation.
  • Furniture is positioned to maintain clear visibility from reception.
  • Circulation path avoids congestion and adheres to accessibility norms.
  • Waiting area placed adjacent to window for natural lighting.
  • Design reflects hospitality aesthetic—simple, welcoming, and functional.
  • Layout maintains symmetry to create visual balance in small spaces.

Here are the **Trainer Guidelines** for conducting the hands-on activity:
"Prepare a Conceptual Layout Draft for a Multipurpose Room" (Unit 7.2 – Draughtsperson, Interior Design):

Trainer Guidelines

1. Setup and Materials

- Provide participants with sketch paper, scale rulers, pencils, erasers, and markers.
- Offer printed or digital project briefs (residential room, office corner, hospitality lounge, etc.).
- Ensure access to layout references or sample sketches for inspiration.

2. Instructions to Participants

- Select one scenario from the given options (e.g., classroom, studio, waiting area).
- Draft a **top-view layout sketch** (not to scale) showing:
  • Furniture positioning
  • Circulation pathways
  • Key functional zones
  • Light sources and access points
- Use arrows, labels, and icons to annotate the drawing.
- Add a short justification (5–6 points) explaining layout logic.

3. Tips

- Encourage participants to think about comfort, functionality, and flow.
- Guide them to consider real-world constraints (e.g., access, lighting, noise).
- Support groups in choosing the most effective drafting technique (hand sketching, zoning blocks, modular layout).

4. Review and Feedback

- Ask each learner/group to present their layout.

- Prompt peer feedback based on:
  - Zoning clarity
  - Furniture placement and accessibility
  - Use of annotations
- Summarize key takeaways: adaptability of layout techniques, clarity in communication, and sector-specific design thinking.

Solution to Exercises

A. Multiple Choice Questions (MCQs)

1. Priya is designing a modular kitchen. Which technique should she begin with to communicate the initial concept?
   C. Hand sketch
2. A school classroom design requires alignment with daylight entry and safe materials. This consideration falls under:
   C. Practical factor
3. In a retail kiosk plan, the draughtsperson positions display stands away from direct sunlight. This action addresses:
   D. Environmental control
4. A draughtsperson uses zoning diagrams and 3D rendering for a boutique hotel. This is primarily to:
   C. Show guest circulation and ambiance
5. Which of the following is a legal requirement in an academic institution layout?
   C. Universal design compliance
6. While designing an office, Priya ensures partition walls don't block HVAC airflow. This is related to:
   A. Technical accuracy
7. Which factor affects both the material selection and maintenance strategy in humid climates?
   B. Practical factor

Sample Solution for Hands-On Activity Draft a Rough Layout for a Multi-Zone Interior Space

Chosen Space Type: Hotel Lobby with Waiting Area (Hospitality)

Rough Sketch Overview (Description):

- **Zoning:**
  - Public – Entrance, Waiting Lounge
  - Semi-private – Reception, Luggage Drop
- **Furniture Layout:**
  - 2 sets of sofas (3-seater and 2-seater) arranged in L-shape
  - Reception counter near entrance
  - Coffee table and indoor plants for aesthetics
- **Entry/Exit Points:**
  - Main entrance (double-door) on north side
  - Staff-only access door behind reception
- **Lighting Placement:**
  - LED spotlights above seating
  - Natural light from glass façade (east side)
- **Circulation Flow:**
  - Clear 1.5m-wide circulation path from entrance to reception and lounge
  - Signage to guide movement

Explanatory Notes

- **Sketching Technique:** Used hand sketching with pencil and markers for quick zoning and furniture layout, suitable for hospitality projects requiring iterative design discussions.
- **Environmental Factors:** Factored in natural light from east-facing façade and HVAC vents placement to enhance user comfort in waiting zones.
- **Functional or Legal Constraints:** Maintained 1.5m-wide circulation per NBC standards; ensured barrier-free access for differently abled users.
- **Software/Tools Used:** Rough plan done manually; would convert final version in AutoCAD after zoning and furniture approval.
- **Assumptions:** Assumed client wants premium yet compact lobby experience; materials and finishes to match brand aesthetics.

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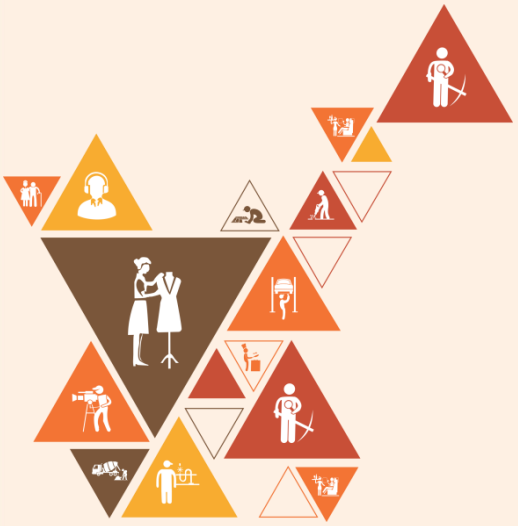
8. Documentation and Reporting

Unit 8.1: FF&E File Preparation and Review Process

Unit 8.2: Document Library



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Key Learning Outcomes

At the end of this module, the participants will be able to:

1. List the various elements of a Furniture, Fixtures, and Equipment (FF&E) file.
2. Explain how to prepare Furniture, Fixtures, and Equipment (FF&E) File for various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.
3. Explain the process to review drafts prepared by teams.
4. Discuss the importance of creating a documentation library for the designing process.
5. Explain the process of creating and managing the document library.
6. Build a documentation library.
7. Explain the process of timely completion of documents and reporting.
8. Identify the need for a record-keeping and documentation library in the effective execution of interior designing projects.
9. Explain the process of maintaining a document library related to various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.

UNIT 8.1: FF&E File Preparation and Review Process

Unit Objectives

At the end of this unit, the participants will be able to:

1. List the various elements of a Furniture, Fixtures, and Equipment (FF&E) file.
2. Explain how to prepare Furniture, Fixtures, and Equipment (FF&E) File for various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.
3. Explain the process to review drafts prepared by teams.

Say

In this unit, we will explore how an FF&E file serves as a crucial bridge between design intent and on-site execution. It ensures that every piece of furniture, fixture, and equipment is accounted for, specified, sourced, and installed properly.

Ask

- What types of items do you think are included in FF&E files?
- Why might it be important to track these separately from architectural drawings?

Explain

An FF&E file includes movable elements like furniture, lighting, and decorative items—anything not permanently fixed. It supports design uniformity, procurement, vendor coordination, budgeting, and installation. Especially in large-scale projects (like hotels or schools), this file improves efficiency, prevents errors, and supports future maintenance.

Show the participants a sample FF&E table that includes fields such as Item Code, Quantity, Finish, Vendor Name, and Placement Instructions.

Debrief

A well-maintained FF&E file is vital for execution success and post-project maintenance. It ensures that design choices are well-documented, budgeted, and aligned with procurement and vendor teams.

Notes for Facilitation

- Show printed or digital sample FF&E schedules.
- Use visual walkthroughs of completed interiors to link items with FF&E entries.
- Highlight real-world FF&E coordination challenges (e.g., mismatched finishes, delayed procurement).

In this session, we will understand how a draughtsperson must review drafts systematically to ensure compliance, accuracy, and client alignment.

You may ask:

- What would you check first while reviewing a drawing file from a teammate?
- Why is it important to cross-check with civil and MEP drawings?

The review process includes multiple checks: completeness of submission, alignment with the design brief, technical accuracy (scaling, dimensions, symbols), cross-verification with MEP/civil drawings, redline feedback, and version control. A strong review prevents costly errors like HVAC clashes or misaligned cabinetry. It also ensures branding and SOP compliance in commercial settings.

Walk participants through a sample review sheet and a redlined layout, explaining what to look for at each step.

Activity – Review a Draft

- Provide participants with a sample layout and brief.
- Ask them to perform a review by checking:
  - Alignment with the brief
  - Technical clarity
  - Possible service clashes
  - Formatting consistency
- Have them mark feedback using red pen or comments digitally.

Debrief

A systematic review helps draughtspersons uphold design quality, improve communication with teams, and ensure readiness for client approval and site execution.

- Provide versioned drafts to simulate review loops.
- Demonstrate redlining digitally and on paper.
- Discuss the consequences of poor draft review with real case examples.

Sample Solution for Activity: Prepare FF&E File for Different Interior Design Projects

Project Type Chosen: Hospitality – Hotel Room

Item Code	Description	Category	Qty	Dimensions (L×W×H)	Material / Finish	Location	Supplier / Brand	Unit Cost (₹)	Total Cost (₹)	Remarks / Usage Context
HOSP01	Queen Size Bed	Furniture	1	198×152×45 cm	Teak wood, upholstered headboard	Bedroom	Godrej Interio	28,000	28,000	Main sleeping unit
HOSP02	Bedside Table	Furniture	2	50×40×50 cm	Engineered wood, matte finish	Bedroom sides	Urban Ladder	4,500	9,000	Supports lamps, storage
HOSP03	LED Wall Light	Fixture	2	15×10×20 cm	Stainless steel, frosted glass	Above side tables	Philips	2,000	4,000	Ambient lighting
HOSP04	Split AC (1.5 Ton)	Equipment	1	Standard	White, plastic casing	Upper wall	Daikin	38,000	38,000	Cooling system
HOSP05	Desk & Chair Set	Furniture	1 set	120×60×75 cm	Laminated wood & steel frame	Corner work area	Featherlite	12,000	12,000	Business desk for guests
HOSP06	Wardrobe (2-door)	Furniture	1	180×60×210 cm	Plywood, laminate finish	Entry side	Livspace	18,000	18,000	Guest clothing storage
HOSP07	Ceiling Fan	Equipment	1	120 cm sweep	White ABS plastic	Ceiling center	Havells	3,000	3,000	Air circulation
HOSP08	Full-length Mirror	Fixture	1	50×150 cm	Mirror glass, MDF frame	Near wardrobe	Home Centre	2,500	2,500	Dressing utility
HOSP09	Blackout Curtains	Fixture	2 sets	200×220 cm	Polyester, grey textured	Window	D'Decor	4,000	8,000	Light and privacy control
HOSP10	Mini Fridge	Equipment	1	45×45×70 cm	White steel	Under desk	LG	10,000	10,000	Refreshments and minibar storage

Total Estimated Cost: ₹1,32,500

UNIT 8.2: Document Library

Unit Objectives

At the end of this unit, the participants will be able to:

1. Discuss the importance of creating a documentation library for the designing process.
2. Explain the process of creating and managing the document library.
3. Build a documentation library.
4. Explain the process of timely completion of documents and reporting.
5. Identify the need for a record-keeping and documentation library in the effective execution of interior designing projects.
6. Explain the process of maintaining a document library related to various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.

Say

In this unit, we will explore the purpose and process of creating a documentation library in interior design projects. A centralized document library ensures consistency, accuracy, and accountability across the design and execution process.

Explain

A documentation library is a central digital or physical repository where all project-related documents are stored in an organized and secure manner. These may include technical drawings, FF&E schedules, vendor quotes, approvals, BOQs, and recce photos. It helps manage version control, improves collaboration between teams, and ensures legal and quality compliance. For example, in a hospitality project, having an organized subfolder for MEP drawings, client approvals, and vendor files prevents delays and rework.

Debrief

A well-maintained document library is essential for project efficiency, legal compliance, and communication. It allows a draughtsperson to manage revisions, track progress, and provide clear documentation for execution.

- Demonstrate folder hierarchy using an actual cloud drive (Google Drive or Dropbox).
- Provide examples of real project file names and folder naming logic.
- Discuss version control issues with poorly managed documentation.
- Introduce simple platforms like Trello or Notion for document coordination.

Solution to Exercises

A. Multiple Choice Questions (MCQs)

1. What is the primary purpose of an FF&E file in an interior design project?

   c) Cataloguing movable furniture, fixtures, and equipment

2. Which of the following is NOT a benefit of maintaining a well-organized documentation library?

   b) Enables colour correction in design

3. Which step ensures that interior design drawings don't clash with plumbing or electrical layouts?
   d) Cross-verification with MEP and civil drawings

4. What should a standard file naming convention include for documents in the library?
   c) Project name, document type, and version/date

5. Which tool is recommended to manage version control and cloud storage for documentation libraries?
   c) Google Drive or OneDrive

Sample Solution for Activity: Build a Documentation Library

Selected Project Type: Commercial – Office Space

Folder Structure:

1. **Concept Designs**
    - *Office360_ConceptMoodboard_Rev1_15Jul2025.pdf*
    - *Office360_DesignNarrative_Rev1_15Jul2025.docx*
2. **Technical Drawings (2D/3D)**
    - *Office360_FloorPlan_Rev2_18Jul2025.dwg*
    - *Office360_Elevation_Rev1_18Jul2025.pdf*
3. **FF&E Files**
    - *Office360_FFE_Schedule_Rev1_19Jul2025.xlsx*
    - *Office360_WorkstationSpecs_Rev1_19Jul2025.pdf*
4. **MEP Layouts**
    - *Office360_ElectricalPlan_Rev1_20Jul2025.dwg*
    - *Office360_HVACLayout_Rev1_20Jul2025.dwg*
5. **Client Communication**
    - *Office360_ClientMeetingNotes_10Jul2025.docx*
    - *Office360_EmailSummary_12Jul2025.msg*
6. **Site Photos & Recce Reports**
    - *Office360_RecceImages_Set1_09Jul2025.zip*
    - *Office360_SiteConditionReport_Rev1_10Jul2025.pdf*
7. **Approvals & Compliance**
    - *Office360_BuildingApproval_License_Rev1_05Jul2025.pdf*
    - *Office360_FireSafetyNOC_Rev1_07Jul2025.pdf*
8. **Vendor Quotes & BOQs**
    - *Office360_WorkstationVendorQuote_XYZInteriors_Rev1_16Jul2025.pdf*
    - *Office360_BOQ_Rev2_17Jul2025.xlsx*

File Naming Convention Used:

Format: [ProjectName]_[DocumentType]_[Rev/Date]
Example: Office360_HVACLayout_Rev1_20Jul2025.dwg

Version Control & Access:

- Outdated files archived in a folder titled Old Versions.
- Shared folder via Google Drive with view/edit access based on team roles.
- Metadata tags (Client: ABC Corp | Designer: Sheetal | Location: Bangalore) added in folder descriptions.

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9. Health safety, and Greening Practices at the Worksite

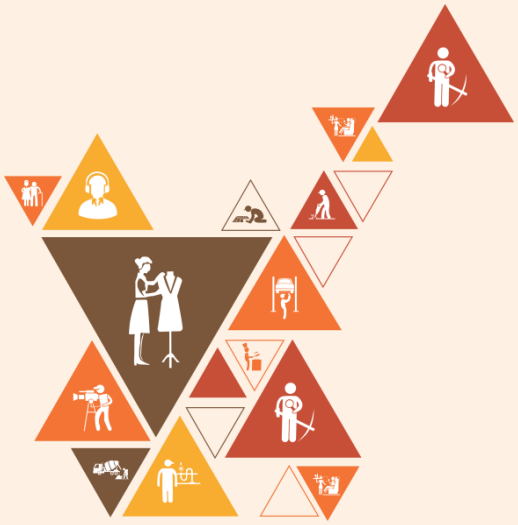
Unit 9.1 - Health and Safety Protocols

Unit 9.2 - Hygiene, PPE and Worksite Practices

Unit 9.3 - Emergency Preparedness and Response

Unit 9.4 - Safety Signs

Unit 9.5 - Greening Practices



FFS/N8205

Key Learning Outcomes

At the end of this module, the participants will be able to:

1. Identify all the health and safety protocols associated with working at the worksite.
2. Appraise suitable health and hygiene protocols while working at the worksite.
3. Explain various health and safety hazards associated with the project execution during construction and subsequent maintenance.
4. Analyse and identify worksite site hazards during construction and subsequent maintenance.
5. Explain the importance of an effective health and safety plan during project execution.
6. Explain how to design and implement a health and safety plan for the worksite
7. Identify the poor organizational practices concerning hygiene, food handling, cleaning.
8. Explain the importance of using Personal Protective Equipment (PPE) based on the manufacturer's instructions and how to use it at the worksite.
9. Identify the health and safety measures associated with the project designs.
10. Examine the project design for proper implementation of health and safety measures.
11. Explain the significance of maintaining work ethics, dress code, and personal hygiene.
12. Explain the importance of workplace sanitization and demonstrate the correct way of sanitizing and washing hands.
13. Explain the operational guidelines for the usage of emergency tools and equipment.
14. Explain the steps involved in responding to an emergency (fire, short circuit, accidents, earthquake, etc.) process in line with organizational protocols.
15. Explain the first aid procedures in case of emergency and demonstrate CPR.
16. Identify all the concerned control measures while working at the worksite.
17. Identify suitable methods to communicate necessary control measures to concerned team members.
18. Explain the types of hand signals and signage and their application.
19. Identity and interpret the given pictorial representations of safety signs and hand signals.
20. Explain the various ways of saving energy.
21. Explain the benefits of periodic cleaning of tools and equipment.
22. Demonstrate ways for efficient utilization of material and water.
23. Employ different ways to check if tools and equipment are functioning correctly and report anomalies, if any.

UNIT 9.1: Health and Safety Protocols

Unit Objectives

At the end of this unit, the participants will be able to:

1. Identify all the health and safety protocols associated with working at the worksite.
2. Appraise suitable health and hygiene protocols while working at the worksite.
3. Explain various health and safety hazards associated with the project execution during construction and subsequent maintenance.
4. Analyse and identify worksite site hazards during construction and subsequent maintenance.
5. Explain the importance of an effective health and safety plan during project execution.
6. Explain how to design and implement a health and safety plan for the worksite

Say

Let us understand the essential safety protocols that must be followed at any interior design or construction worksite. These ensure safety for workers, visitors, and the environment.

Ask

- What safety procedures do you think are mandatory at a typical construction site?
- Have you seen any warning signs or safety barriers at work areas?

Explain

Key protocols include wearing PPE (helmets, boots, gloves), maintaining safety signage, emergency evacuation plans, securing tools and materials, and proper waste disposal. These protocols are critical to avoid accidents, fines, and project delays.

1. Common Workplace Hazards

Workplace hazards can range from physical risks to chemical exposures. Identifying these hazards is the first step in ensuring a safe working environment. Common workplace hazards include:

- **Physical Hazards:** These include slip, trip, and fall hazards, moving machinery, or heavy equipment. Other physical hazards involve noise, extreme temperatures, and vibration, which can cause long-term health issues like hearing loss or musculoskeletal disorders.
- **Chemical Hazards:** Exposure to hazardous chemicals, fumes, gases, or vapours can lead to respiratory issues, skin irritation, or more severe health conditions like poisoning or

organ damage. These are commonly found in industries such as manufacturing, laboratories, and cleaning.

- **Biological Hazards:** These include exposure to bacteria, viruses, fungi, or other biological agents that could lead to infections, diseases, or allergic reactions. Healthcare, agriculture, and laboratory settings are more prone to biological hazards.
- **Ergonomic Hazards:** Poor workstation design, repetitive motion, and awkward postures can lead to musculoskeletal disorders such as back pain, carpal tunnel syndrome, or joint problems.
- **Electrical Hazards:** Exposure to electrical sources, such as faulty wiring or unprotected power lines, can result in burns, electric shocks, or electrocution.
- **Psychosocial Hazards:** Workplace stress, bullying, harassment, and mental health challenges are also considered hazards. These affect workers' well-being, productivity, and safety.
- **Fire Hazards:** The presence of flammable materials, chemicals, or faulty electrical equipment can increase the risk of fires or explosions, particularly in factories, kitchens, and warehouses.

Understanding these hazards helps in identifying which Personal Protective Equipment (PPE) is required to safeguard workers.

UNIT 9.2: Hygiene, PPE and Worksite Practices

Unit Objectives

At the end of this unit, the participants will be able to:

1. Identify the poor organizational practices concerning hygiene, food handling, cleaning.
2. Explain the importance of using Personal Protective Equipment (PPE) based on the manufacturer's instructions and how to use it at the worksite.
3. Identify the health and safety measures associated with the project designs.
4. Examine the project design for proper implementation of health and safety measures.
5. Explain the significance of maintaining work ethics, dress code, and personal hygiene.
6. Explain the importance of workplace sanitization and demonstrate the correct way of sanitizing and washing hands.

Ask

Why is it important to use the correct Personal Protective Equipment (PPE) in the workplace?

Select Appropriate PPE for Different Tasks

Once workplace hazards are identified, selecting the correct PPE for each task is critical in ensuring worker safety. Appropriate PPE varies depending on the specific risk involved. Key categories of PPE include:

- **Head Protection (Helmets and Hard Hats):** These are necessary when working in environments where there is a risk of falling objects, bumps to the head, or electrical hazards. Construction sites, factories, and warehouses typically require hard hats.
- **Eye and Face Protection (Goggles, Face Shields):** Workers exposed to chemical splashes, flying debris, or intense light (e.g., welding) need eye protection. Safety goggles, face shields, and safety glasses are essential to protect against eye injuries.
- **Hearing Protection (Ear Plugs, Ear Muffs):** Exposure to loud noise in workplaces such as factories, construction sites, and airports can damage hearing. Earplugs or earmuffs protect workers from hearing loss due to prolonged noise exposure.
- **Respiratory Protection (Masks, Respirators):** In environments where workers may be exposed to harmful dust, fumes, gases, or airborne pathogens, respirators or masks are necessary to prevent inhalation of hazardous substances.
- **Hand and Arm Protection (Gloves):** Gloves are critical in environments where workers handle sharp objects, chemicals, heat, or electrical equipment. Different materials (latex, rubber, leather, etc.) are used based on the type of hazard.

- **Foot Protection (Safety Boots):** Workers exposed to falling objects, slippery surfaces, or electrical hazards need sturdy, protective footwear. Steel-toe boots, rubber boots, and slip-resistant shoes are examples of foot protection.
- **Body Protection (Aprons, Vests, Coveralls):** Depending on the task, protective clothing such as aprons, coveralls, or high-visibility vests may be necessary. For example, flame-resistant clothing is required in welding or firefighting jobs, while high-visibility vests are used in road construction.
- **Fall Protection (Harnesses, Lanyards):** Workers working at heights, such as construction workers, need fall protection equipment like harnesses, lanyards, and safety ropes to prevent falls from elevated surfaces.
- **High-Visibility Clothing:** Workers in environments where visibility is poor (e.g., roadwork or in large factories) need high-visibility clothing to prevent accidents and collisions.

It is important to assess each task, the level of risk, and environmental conditions before selecting the appropriate PPE to protect workers from harm effectively.

By identifying the hazards present in the workplace and selecting the correct PPE, employers can ensure the safety of their workforce, reduce injury rates, and maintain a compliant, health-conscious work environment.

Activity

Group Activity: Workplace Hazard Identification and PPE Selection
Group Size: 4–6 participants

Materials:
Workplace hazard scenario cards (each with a description of a different workplace task or scenario)
PPE selection chart
Markers and paper for group presentations

Activity Duration: 45 minutes

Instructions:

1. **Introduction (5 minutes):** Briefly review common workplace hazards and the different types of PPE used for protection.
2. **Scenario Distribution (5 minutes):** Divide the participants into groups. Provide each group with a workplace hazard scenario card (e.g., working with chemicals, lifting heavy objects, operating machinery).
3. **Task (20 minutes):** Each group will:
   o Identify the hazards in the given scenario.
   o Discuss and select the appropriate PPE to mitigate the risks.

o Create a short presentation to explain their findings, justifying the selected PPE for each hazard in their scenario.

4. **Group Presentations (10 minutes):** Each group will present their scenario and PPE selection to the rest of the class.

Demonstrate

- Ensure that each group discusses not only the types of hazards but also why the selected PPE is suitable for each specific task.
- Encourage participants to consider PPE beyond basic equipment, such as respirators, gloves, or hearing protection.
- Offer examples from various industries to broaden the understanding of hazard types (construction, manufacturing, laboratories, etc.).
- Answer all the queries/doubts raised by the trainees in the class.
- Encourage other trainees to answer problems and boost peer learning in the class.
- Guide the trainees throughout the activity.
- Ensure that all trainees participate in the activity.

Debrief (5 minutes): Discuss the different approaches taken by the groups, clarify any misconceptions, and reinforce key safety concepts.

Notes for Facilitation

- Ensure that each group discusses not only the types of hazards but also why the selected PPE is suitable for each specific task.
- Encourage participants to consider PPE beyond basic equipment, such as respirators, gloves, or hearing protection.
- Offer examples from various industries to broaden the understanding of hazard types (construction, manufacturing, laboratories, etc.).
- Answer all the queries/doubts raised by the trainees in the class.
- Encourage other trainees to answer problems and boost peer learning in the class.

UNIT 9.3: Emergency Preparedness and Response

Unit Objectives

At the end of this unit, the participants will be able to:

1. Explain the operational guidelines for the usage of emergency tools and equipment.
2. Explain the steps involved in responding to an emergency (fire, short circuit, accidents, earthquake, etc.) process in line with organizational protocols.
3. Explain the first aid procedures in case of emergency and demonstrate CPR.
4. Identify all the concerned control measures while working at the worksite.
5. Identify suitable methods to communicate necessary control measures to concerned team members.

Resources to be Used

Participant Handbook, pen, notebook, whiteboard, flipchart, markers, laptop, projector, emergency signage samples, evacuation plan chart, sample PPE kits.

Say

Emergencies can happen at any time on a construction or interior design site—be it fire, electrical hazards, or accidents. In this unit, we will learn how to prepare for such situations, understand emergency protocols, and explore how to respond effectively to protect lives and property.

Ask

- Have you ever witnessed an emergency at a workplace? What was the response like?
- Why do you think it's important to have a proper emergency plan on-site?

Allow 2–3 participants to respond and note key points on a flipchart. Use their responses to build engagement before moving to the next section.

Explain

Emergency preparedness and response are essential elements of worksite safety. In this unit, we will cover:

1. **Types of Emergencies on a Worksite**
   – Fire, electrical short-circuit, chemical spills, equipment failure, natural disasters, etc.

2. **Emergency Response Protocols**
   – Evacuation procedures
   – Fire drill procedures
   – Using fire extinguishers and emergency exits
   – Roles of safety marshals and first responders

3. **First Aid and CPR Awareness**
   – Basic knowledge of how to respond until medical help arrives
   – Introduction to emergency contact lists and on-site medical kits

4. **Safety Signage and Communication**
   – Importance of safety signage (exit signs, fire extinguisher locations, etc.)
   – Use of alarms, megaphones, and PA systems for alerts

5. **Creating a Response Plan**
   – Importance of mock drills and continuous awareness training
   – Assigning roles and responsibilities during emergencies
   – Displaying emergency contact numbers and escape routes at key locations

Debrief

In an emergency, quick thinking and preparation can save lives. By following the protocols, being aware of the surroundings, and participating in drills, each person at the site can contribute to minimizing damage and injury. Your safety—and that of your team—begins with preparedness.

Notes for Facilitation

- Use visuals like emergency exit layouts and signage examples.
- Share a short video (if available) showing emergency drill simulations.
- Reinforce the importance of communication and teamwork during emergencies.
- Clarify local statutory requirements related to fire safety and health emergencies.
- Encourage participants to suggest improvements based on past work experiences.

UNIT 9.4: Safety Signs

Unit Objectives

At the end of this unit, the participants will be able to:

1. Explain the types of hand signals and signage and their application.
2. Identity and interpret the given pictorial representations of safety signs and hand signals.

Resources to be Used

Participant Handbook, projector, printed pictorial safety signs and hand signal cards, whiteboard, markers, flipchart, video clips of real-life construction scenarios (optional).

Say

Today, we will learn how hand signals and safety signs help maintain safety and communication at worksites, especially in noisy or hazardous conditions. You, as future Assistant Project Managers, will be expected to understand, interpret, and communicate using these signals effectively to avoid mishaps.

Ask

- Have you ever seen hand signals being used on construction or busy worksites? Can you describe any?
- Why do you think visual communication is important in a noisy environment?

Note down responses on a flipchart/whiteboard and relate them to real site scenarios.

Explain

Provide a detailed explanation using the Participant Handbook:

- Describe the **types of hand signals**, such as Stop, Move Forward, Move Backwards, Lift, Lower, Warning, All Clear, and Emergency Stop. Emphasize body gestures and the exact motion.
- Show visuals or mimic each gesture to enhance recall.
- Explain **types of pictorial safety signs**—Prohibition, Mandatory, Warning, and Emergency signs—with examples.

- Discuss why these are important for both illiterate and multilingual workers on site.

Practical Example:
At a renovation site where loud drilling is ongoing, the supervisor uses the “Stop” signal to avoid an incoming forklift. This prevents a collision and ensures the safety of everyone around.

Do

Demonstration + Role Play

- Distribute printed cards of different hand signals and pictorial signs.
- Ask participants to form pairs—one acts as a site worker, the other as a spotter giving signals.
- Each pair performs a simple scenario using hand signals, while the class identifies the signal and its meaning.
- Display common pictorial signs and ask participants to interpret them.

Debrief

Reinforce that safety signs and hand signals are standardized tools to protect lives on-site. As future supervisors, they must lead by example in using and promoting correct signalling methods. Summarize the key signs and their purpose.

Notes for Facilitation

- Use actual props like helmets or gloves to simulate scenarios.
- Play videos or animations to show live worksite signalling.
- Encourage peer feedback during signal demonstration.
- Provide a printed reference sheet with signs for participant kits.
- Reinforce safety compliance standards as per site regulations.

UNIT 9.5: Greening Practices

Unit Objectives

At the end of this unit, the participants will be able to:

1. Explain the various ways of saving energy.
2. Explain the benefits of periodic cleaning of tools and equipment.
3. Demonstrate ways for efficient utilization of material and water.
4. Employ different ways to check if tools and equipment are functioning correctly and report anomalies, if any.

Say

In this unit, we will explore practical strategies for integrating sustainability into interior design execution. From energy efficiency and material optimization to inclusive design and biophilic elements, even small interventions can contribute significantly to environmental impact and long-term project value.

Ask

- What actions can you take on-site to reduce energy or material wastage?
- Have you seen indoor spaces using natural elements like green walls or skylights?
- How can we ensure our site is inclusive for all users?

Explain

Greening practices improve environmental performance and project sustainability. Key practices include:

Energy Conservation:
- Use LED lights and sensor-based controls
- Maximize daylight and cross ventilation
- Unplug unused tools and schedule high-load equipment wisely

Tool Maintenance & Cleaning:
- Clean tools to improve precision and prevent breakdowns
- Clean equipment reduces project delays and ensures safety

Efficient Material & Water Use:
- Measure before cutting/using materials
- Reuse wood/fabric scraps; use low-flow faucets
- Recycle greywater for cleaning

Sustainability Guidelines:
- Use low-VOC and recyclable materials
- Maintain documentation for sustainable vendors
- Plan waste segregation and reuse

Biophilic Design Elements:
- Use indoor plants, natural materials, and green corners
- Design for natural light and air quality
- Set up a maintenance schedule for plant health

Accessibility Guidelines (PwD):
- Maintain 1200 mm wide paths
- Add ramps and tactile signage
- Ensure accessible furniture height and layout

Debrief:

Adopting greening practices makes interior design more responsible, efficient, and future-ready. Draughtspersons who understand these guidelines can add long-term value to projects by improving sustainability, reducing resource costs, and ensuring inclusive, healthy environments.

Notes for Facilitation

- Show examples of real green-certified interiors and indoor plant zones.
- Provide checklists for energy, water, and tool management.
- Encourage participants to suggest low-cost green upgrades for existing designs.

Sample Solution to Activity: Tool Functionality Check and Anomaly Reporting in Interior Design Projects

Sample Tool Functionality Checklist

Tool Name	Observation	Is it Functional?	Anomaly Found	Action Taken	Reported To
Electric Drill Machine	Minor sparks from switch, slightly noisy	Yes	Switch sparking	Cleaned switch; tagged for review	Site Supervisor
Measuring Tape	Outer casing cracked, markings slightly faded	Yes	Cracked casing	Handled with care; replacement suggested	Senior Draughtsperson
Spirit Level	Bubble misaligned, visible air gap irregular	No	Calibration error	Set aside; requested replacement	Store Incharge
Tile Cutter	Blade blunt, emits burning smell on test run	No	Blade wear & overheating	Marked for blade replacement	Maintenance Technician
Paint Spray Gun	Dust clog at nozzle, uneven spray pattern	Yes	Partial clog	Nozzle cleaned; tested again	Trainer

Reporting Format:

- **Method Used:** Digital log entry via project site app (InteriorLog+)
- **Follow-Up:** Supervisor acknowledged issues, maintenance scheduled within 24 hrs.

Solution to Exercise

A. Multiple Choice Questions (MCQs)

1. What is a primary purpose of health and safety protocols at the worksite?
   b. To prevent accidents, injuries, and health issues

2. Which of the following is a key responsibility when using Personal Protective Equipment (PPE)?
   b. Use it as per the manufacturer's guidelines

3. What is essential for mitigating health and safety hazards on the worksite?
   a. Regular cleaning of the worksite

4. Which emergency procedure should workers be trained in?
   b. Using emergency equipment and performing CPR

5. What is the function of safety signage and hand signals at a worksite?
   b. To communicate safety instructions and prevent accidents

Activity: Demonstration

Activity 1: Execute a Fire Drill and How to Use a Fire Extinguisher

Materials Required:

- Fire extinguisher (preferably a demo or empty training model – ABC type recommended)
- Safety cones or boundary markers to define safe areas
- Fire alarm or simulation buzzer
- Smoke machine or poster indicating "fire zone" (optional for demonstration)
- Printed fire evacuation map or layout
- Emergency exit signage
- Stopwatch or timer
- Attendance sheet (for headcount during evacuation)
- Whistle (for drill coordination)
- First aid kit (for demo context)
- Fire safety signage (for awareness)
- PPE (e.g., helmets, safety gloves – optional for realism)

Activity 2: Demonstrate How to Give CPR

Materials Required:

- CPR mannequin (adult-sized torso preferred)
- Disposable gloves
- CPR face shield or mask (for hygiene during mouth-to-mouth demo)
- Floor mat or clean surface for CPR demo
- First aid kit
- Timer (to simulate real-time emergency response)
- Chart/poster of CPR steps and emergency numbers
- Projector or screen (optional, to show CPR video before live demo)

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10. Employability Skills

DGT/VSQ/N0102

Employability Skills is available at the following location

https://www.skillindiadigital.gov.in/content/list

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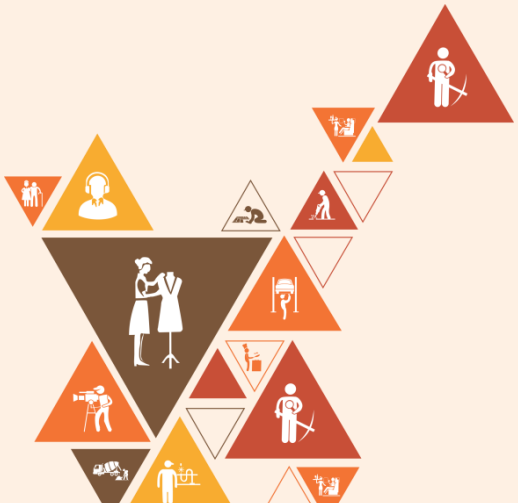
11. Technicalities of Residential and Kitchen Projects

Unit 11.1: Design Themes and Layout Planning for Residential and Kitchen Projects

Unit 11.2: Site Documentation and Measurement in Residential and Kitchen Projects



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Key Learning Outcomes

At the end of this module, the participants will be able to:

1. List different types of design themes for residential and kitchen spaces.
2. Discuss the various elements of a masonry structure affecting the residential and kitchen project.
3. Discuss the various techniques associated with layout designing in a residential and kitchen project.
4. Interpret and identify the appropriate kitchen and residential layout based on physical survey and recce.
5. Explain the process of performing measurement activities using specified tools and equipment in a residential and kitchen project.
6. Identify suitable tools and equipment to document the worksite in the form of photos and videos in a residential and kitchen project.

UNIT 11.1: Design Themes and Layout Planning for Residential and Kitchen Projects

Unit Objectives

At the end of this unit, the participants will be able to:

1. List different types of design themes for residential and kitchen spaces.
2. Discuss the various elements of a masonry structure affecting the residential and kitchen project.
3. Discuss the various techniques associated with layout designing in a residential and kitchen project.
4. Interpret and identify the appropriate kitchen and residential layout based on physical survey and recce.

Say

Designing residential and kitchen spaces requires a keen eye for aesthetics and practical functionality. Let us explore how a draughtsperson plays a key role in layout planning by considering themes, structure constraints, and site realities—through a real case scenario.

Ask

- What are some common design themes used in Indian kitchens and homes today?
- How can masonry elements limit design changes in existing flats?
- Which layout principles should be prioritized in small kitchens?
- Why is a physical recce crucial before finalizing a layout?

Explain

Case Study: Technicalities of Residential Kitchen Projects – A Draughtsperson's Perspective

In this case, Ravi, a draughtsperson in Ahmedabad, was tasked with revamping a compact kitchen in a 2BHK apartment for the Joshi family. His responsibilities included conducting a physical survey, identifying design themes, understanding structural constraints, and drafting layout options aligned with functional needs and client preferences. His work showcases the practical and creative aspects of draughtsmanship in real-world settings.

Types of Design Themes for Residential and Kitchen Spaces

Design themes influence aesthetics and functionality. Modern Minimalist focuses on clean lines and neutral palettes.

Traditional Indian features include wooden textures and ornate details. Industrial Urban uses raw materials like concrete and matte black. Transitional blends modern convenience with ethnic elements. Ravi selected a transitional theme combining modular units with jali patterns, reflecting both practicality and culture.

Masonry Elements Impacting Design

Structural components like beams, walls, and columns can restrict alterations. In this case, a load-bearing wall restricted open planning, a lintel beam limited cabinet height, and a protruding column reduced usable countertop space. These elements had to be documented and factored into the design to ensure structural safety and visual balance.

Techniques for Layout Designing

Effective kitchen layout requires optimizing workflows. Techniques used by Ravi included:

- **Work Triangle Optimization**: Placing hob, sink, and fridge logically.
- **Modular Planning**: Using standard cabinet sizes for ease of fabrication.
- **Zoning**: Defining clear washing, prep, and cooking areas.
- **Overhead Storage Adjustment**: Customizing cabinet heights to structural limitations.
- **Space-saving Features**: Integrating pooja corners in unused niches.

Physical Survey and Layout Interpretation

Accurate layouts depend on thorough site assessments. Ravi used measuring tools, sketched layouts, marked service lines, and took detailed photos. This ensured alignment with physical conditions and helped avoid surprises during execution. The final plan maximized space utility while retaining ventilation and natural light.

Debrief

As we saw in Ravi's case, a draughtsperson must go beyond drafting—they must observe, adapt, and co-create with designers. Your understanding of themes, structure, and layout techniques ensures that every design is functional, aesthetic, and feasible.

Notes for Facilitation

- Use a layout diagram from Ravi's case or a similar project to explain zoning and work triangle.
- Share images of different design themes (modern, traditional, transitional, etc.).
- Display a sample masonry layout with beams, walls, and service points for discussion.
- Demonstrate measuring tools like laser meters and grid pads if available. Encourage groups to include cultural and climatic context while choosing themes.

UNIT 11.2: Site Documentation and Measurement in Residential and Kitchen Projects

Unit Objectives

At the end of this unit, the participants will be able to:

1. Explain the process of performing measurement activities using specified tools and equipment in a residential and kitchen project.
2. Identify suitable tools and equipment to document the worksite in the form of photos and videos in a residential and kitchen project.

Say

Before creating any layout or drawing, the first crucial step for any interior project—especially in compact residential and kitchen spaces—is to measure and document the site accurately. Let us understand how a draughtsperson conducts this activity using standard tools and techniques.

Ask

- Why is a physical measurement important before creating a kitchen or room layout?
- What are the key elements that need to be measured on-site?
- Which tools help ensure accuracy in site documentation?
- How can photos and videos help in better design planning?

Explain

Measurement Process Using Specified Tools

Site measurement begins with preparing the tools—laser distance meters, tapes, angle finders, and sketchpads. A visual inspection identifies key features such as structural elements, services, and wall openings. Measurements include room dimensions, ceiling heights, service points, and verifying wall alignment. The data is noted in a standardized format and verified twice to ensure precision before layout drafting begins.

Tools and Equipment for Documentation

Photos and videos are essential to record on-site realities and communicate with team members. Smartphones or digital cameras capture lighting and space proportions. Tripods help with steady shots in narrow kitchens.

Voice recorders help annotate challenges during walkthroughs. Apps like Skitch or Markup assist in tagging problem zones. All data is stored and organized using project management tools for easy access and coordination.

Debrief

Well-documented site data saves time, reduces errors in layout, and ensures better client and team communication. As you have experienced, the accuracy and clarity of measurements and documentation directly impact how feasible and successful the design will be.

Notes for Facilitation

- Display sample images of actual annotated site photos and measurement sheets.
- Emphasize tool handling techniques—especially laser meter, level, and angle finders.
- Create a checklist handout for participants to use during the simulation.
- Encourage participants to practice sketching proportions accurately, even if freehand.
- Reinforce how annotations and cloud documentation improve workflow.

Solution to Exercise

Sample Solution for Activity: Measurement and Site Documentation of a Residential Kitchen Project

Part A: Measurement Activity

Site Measurement Table

Element Measured	Measurement
Room Length	12 ft
Room Width	8 ft
Floor-to-Ceiling Height	9 ft
Window Size	3.5 ft (W) x 4 ft (H)
Door Size	3 ft (W) x 7 ft (H)
Wall Thickness	6 inches
Structural Column Size (if present)	9 inches x 12 inches
Distance between Sink and Gas Point	5.5 ft
Distance between Sink and Socket Point	3 ft
Existing Countertop Length	7 ft
Existing Countertop Height	2.5 ft

Freehand Measured Layout Sketch

- [✓] Sketch made on grid paper with:
    - Walls marked with dimensions
    - Window and door placement with sill/lintel levels
    - Service points (sink, gas inlet, sockets)
    - Existing countertop layout
    - Column and projection (if any)

(*Note: Attach scanned/sketched drawing along with submission*)

Part B: Site Documentation Using Photos and Videos

Photo Archive Folder: /Kitchen_Measurement_Photos

1. Photo of each wall with measurements and notes
2. Close-up of socket and gas inlet area
3. Image of sink and drainage connection
4. Ceiling finish near beam area
5. Floor finish at skirting level
6. Corner view showing countertop termination
7. Masonry issue – dampness on rear wall
8. Structural projection beside window
9. Ventilation outlet/grill photo
10. Natural light entry from the window

(*All images labelled and saved in JPEG format with timestamp*)

Walkthrough Video File: /Kitchen_Site_Video/kitchen_walkthrough.mp4

- Duration: 1 min 42 seconds
- Content:
    - Room overview with clockwise pan
    - Focus on plug points, sink area, gas pipe routing
    - Observations:
        - Limited natural light in rear left corner
        - Beam near the window may restrict cabinet height
        - Uneven tiling observed on floor junction
        - Good cross-ventilation through window and utility door

Observations & Challenges

- The room has an irregular wall corner due to a structural column, affecting modular cabinet placement.
- The lintel height above the window is low, which limits standard overhead storage.
- Minor dampness observed on the rear wall; waterproofing will be required before installation.

Electrical points need repositioning to support under-cabinet lighting and appliances.
Overall layout is feasible for a straight-line or L-shaped kitchen, with slight modifications for structural limitations.

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12. Technicalities of Hospitality Projects

Unit 12.1: Design Planning and Technical Considerations in Hospitality Projects

Unit 12.2: Site Survey and Measurement Techniques for Hospitality Projects

Key Learning Outcomes

At the end of this module, the participants will be able to:

1. Explain various design considerations and worksite requirements of hospitality projects.
2. Discuss the various elements of a masonry structure affecting the hospitality project.
3. Discuss the various techniques associated with layout designing in a hospitality project.
4. Interpret and identify the appropriate hospitality layout based on physical survey and recce.
5. Demonstrate the process of performing measurement activities using specified tools and equipment in a hospitality project.

UNIT 12.1: Design Planning and Technical Considerations in Hospitality Projects

Unit Objectives

At the end of this unit, the participants will be able to:

1. Explain various design considerations and worksite requirements of hospitality projects.
2. Discuss the various elements of a masonry structure affecting the hospitality project.
3. Discuss the various techniques associated with layout designing in a hospitality project.

Say

In hospitality projects like hotels, cafes, or guest lounges, every layout choice influences how the guest feels and moves through the space. In this unit, we will explore a real-world example of how a draughtsperson supports design execution in a heritage hospitality project while balancing aesthetics, structure, and functionality.

Explain

Case Study: Technicalities of Hospitality Projects – A Draughtsperson's Perspective
Arjun, an experienced draughtsperson, was assigned to a boutique hotel lobby and café renovation. The client wanted to preserve the heritage appeal while meeting modern needs. Arjun's tasks included surveying the site, documenting constraints like sloped roofs and thick stone walls, and preparing accurate layouts that respected structural limitations. His solutions demonstrated both technical skill and creative adaptation to preserve the integrity of the space.

Design Considerations and Worksite Requirements in Hospitality Projects
Designing for hospitality involves more than just aesthetics—it's about guest experience, service efficiency, and compliance. Key considerations include:

- Creating smooth guest circulation pathways
- Zoning for noise control (e.g., separating cafés from lounges)
- Incorporating accessibility features
- Planning service access without disrupting guests
- Aligning the ambiance with lighting and interior styling

These considerations guide how a draughtsperson aligns physical plans with emotional guest experiences.

Masonry Elements Affecting Hospitality Projects
Older buildings or heritage properties often have masonry constraints that cannot be altered. In this case:

- Thick stone walls prevented the creation of new passages

- Low lintels restricted modern partitioning
- Sloped ceilings created inconsistent lighting conditions
- Damp-prone walls required treatment before finishing

Understanding and documenting these elements ensures realistic and conflict-free layout execution.

Layout Design Techniques in Hospitality Projects

Hospitality layouts must balance structure, flexibility, and guest comfort. Techniques used include:

- Flexible zoning with screens or movable elements to adapt space without modifying walls
- Grid-based planning aligned with existing walls, columns, and roof slopes
- Circulation mapping to streamline guest and staff movement
- Heritage compliance using reversible elements that don't damage original features
- Integrated lighting planning that respects roof structures while maintaining ambiance

These techniques help deliver visually appealing and structurally feasible spaces.

Debrief

In heritage hospitality projects, a draughtsperson must creatively bridge tradition and modern function. Arjun's work shows that successful layout planning involves not just drawing skills but observation, collaboration, and deep respect for the building's character.

Notes for Facilitation

- Share photos of heritage hotels and boutique cafés to explain design features.
- Use a side-by-side display of 'before' and 'after' layout ideas.
- Introduce heritage compliance guidelines and explain their role in design planning.
- Encourage group critique of layout plans to reinforce design–structure balance.
- Provide examples of modular elements and reversible fixtures commonly used in heritage settings.

UNIT 12.2: Site Survey and Measurement Techniques for Hospitality Projects

Unit Objectives

At the end of this unit, the participants will be able to:

1. Interpret and identify the appropriate hospitality layout based on physical survey and recce.
2. Explain the process of performing measurement activities using specified tools and equipment in a hospitality project.

Say

In hospitality projects like hotels, cafés, or lounges, precise site surveys and measurements ensure that the layout not only looks good but works well for guest comfort and operational flow. Today, we will learn how to assess a space and translate site observations into functional layout recommendations.

Ask

- Why is a physical site survey important before finalizing a hospitality layout?
- What key elements should be recorded during site measurement?
- How do structural and utility conditions affect layout decisions?
- Can layout interpretation influence guest experience? How?

Explain

1. Interpreting Layout Based on Physical Survey and Recce

A physical recce helps understand spatial dynamics—entry points, light, ventilation, and obstructions. In hospitality settings, layouts must balance aesthetics with comfort and flow. Functional zones such as reception, waiting, café, and washroom need to be clearly defined. For example, shifting a café counter to avoid damp zones and align with visible plumbing lines is a practical layout intervention made post-survey.

2. Process of Measurement in Hospitality Projects

The measurement process is systematic and tool-based. It starts with preparing essential tools like laser measurers, tapes, and spirit levels. Key measurements include room size, ceiling height, beam depths, wall thickness, and plug or service points. Draughtspersons must also record irregularities such as uneven floors or obstructed paths. These inputs help in generating accurate drawings and in avoiding last-minute changes during execution.

Debrief

Your ability to interpret real-world site conditions and recommend layout changes ensures both functionality and guest satisfaction. Measurement is not just about numbers—it is about uncovering design possibilities within space limitations.

Notes for Facilitation

- Use sample site photos (with measurements and annotations) to show real-world examples.
- Explain the pros and cons of different layout types (linear, cluster, island, etc.).
- Provide laminated floor plan templates for reuse in simulation exercises.
- Reinforce the importance of accuracy—small miscalculations in hospitality spaces can affect usability and aesthetics.
- Introduce basic symbols for services and structural elements used in as-built drawings.

Sample Solution for the Activity: Site Survey, Measurement, and Layout Interpretation for a Hospitality Space

Part A: Measurement Activities

Site Measurement Table

Element Measured	Location	Dimension (L × W × H)	Notes/Remarks
Reception Counter Space	Near main entrance	2200 mm × 750 mm	Beam overhead restricts height to 2400 mm
Window Opening	East wall	1600 mm × 1200 mm	Good source of natural light
Passage Width	Between lobby and café	1350 mm	Meets accessibility norms
Café Counter	South-west corner	2500 mm × 900 mm	Plumbing point available below counter
Column Projection	Near lounge seating	600 mm × 300 mm	Impacts free circulation, needs to be planned around
Ceiling Beam Depth	Above reception zone	300 mm	Suggests recessed lighting instead of pendant lamps

Entry Door	North wall	1000 mm (W) × 2100 mm (H)	Single swing door; good clearance
Air Conditioning Duct	Over café ceiling	350 mm depth	Adjust pendant lighting position accordingly

Freehand Site Sketch

- Room layout includes marked zones for reception, lounge seating, café counter, and passage.
- Columns, beams, windows, and service points clearly labelled.
- Sketch includes measurement notations and arrow indicators for guest and staff circulation.

(Optional: A scanned or photo version of the sketch may be attached in actual assignment.)

Part B: Layout Interpretation and Suggestions

Zoning Plan

1. **Reception/Check-in Area:**
   Positioned near entrance for quick guest access. Counter aligned to allow clear view of entrance and waiting area.
2. **Guest Waiting Zone:**
   Designed opposite the reception counter with 4 lounge chairs and a coffee table. Positioned to benefit from natural light through the east-facing window.
3. **Café Seating:**
   Café counter placed near the south-west corner (close to plumbing). Cluster seating (4 tables) arranged near the wall with adequate circulation space.
4. **Service Access Path:**
   Separate rear path proposed for staff movement and replenishment, hidden from guest line of sight.
5. **Lighting Plan Adjustments:**
   Beam above reception suggests recessed lighting; café uses pendant lights, adjusted around AC ductwork.
6. **Constraints & Adjustments:**
   - Column near lounge seating used as a divider with vertical greenery
   - Damp-prone wall (north side) avoided for fixed furniture installation
   - Ceiling height variations accommodated in lighting and décor choices

The proposed layout respects existing structural constraints while enhancing guest experience. The linear flow from entrance to reception to café maintains intuitive circulation. Seating zones are organized to optimize comfort and privacy, while structural challenges like columns and ceiling beams have been cleverly integrated into the design through furniture placement and lighting choices. The design ensures accessibility, visibility, and efficient staff operation zones.

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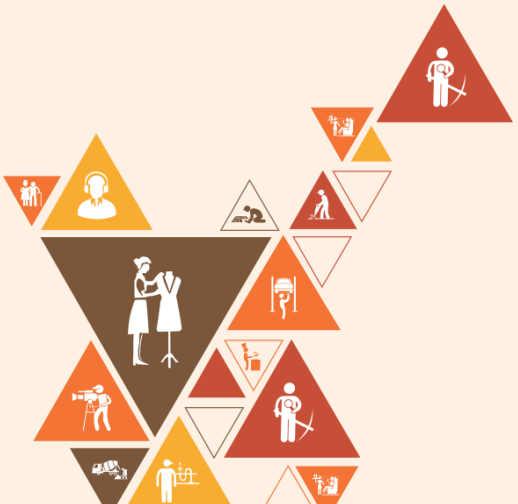
13. Technicalities of Commercial Projects

Unit 13.1: Design and Technical Planning in Commercial Interior Projects

Unit 13.2: Site Recce, Documentation, and Layout Interpretation



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Key Learning Outcomes

At the end of this module, the participants will be able to:

1. Explain various design considerations and worksite requirements of commercial projects.
2. Discuss the various elements of a masonry structure affecting the commercial project.
3. Discuss various technical considerations during site photography and videography.
4. Discuss the various techniques associated with layout designing in a commercial project.
5. Interpret and identify the appropriate commercial layout based on physical survey and recce.

UNIT 13.1: Design and Technical Planning in Commercial Interior Projects

Unit Objectives

At the end of this unit, the participants will be able to:

1. Explain various design considerations and worksite requirements of commercial projects.
2. Discuss the various elements of a masonry structure affecting the commercial project.
3. Discuss the various techniques associated with layout designing in a commercial project.

Say

Commercial interior design is about balancing business needs, functionality, and branding within structural constraints. In this unit, we will explore a real-life case where a draughtsperson helped shape a co-working office layout while tackling real-world site challenges and tight timelines.

Explain

Case Study: Technicalities of Commercial Projects – A Draughtsperson's Perspective
Nikita, a draughtsperson, was assigned a 1200 sq. ft. co-working office interior for a tech startup. The space had to balance team collaboration with individual workstations, integrate technology, reflect brand identity, and stay within budget. She conducted a physical site survey, identified structural issues like column misalignments and floor slopes, and used smart zoning and flexible layout techniques to meet client goals.

1. Design Considerations and Worksite Requirements of Commercial Projects
Commercial design demands space efficiency, flexibility, branding, and technological readiness. In this case, considerations included glare-free lighting, acoustic treatment, modular seating, and compliant access pathways. The site also posed logistical issues like limited furniture entry, duct layout for HVAC, and concealment of service shafts—requiring creative planning by the draughtsperson to ensure both aesthetics and functionality.

2. Masonry Structure Elements Affecting Commercial Projects
Nikita encountered several structural elements during her survey that impacted design feasibility. These included load-bearing walls that limited ventilation, sloped flooring that required levelling, and misplaced columns disrupting spatial planning. Additionally, a beam drop restricted lighting installation, and a shared pantry wall required soundproofing. Accurately documenting these helped the team revise layouts without compromising usability.

3. Techniques Associated with Layout Designing in Commercial Projects
Key techniques used included zoning to separate collaborative and focus zones, grid-based furniture planning aligned with column positions, and service alignment with existing sockets and ports. Nikita used movable partitions to create flexible spaces and retained an open ceiling with exposed ductwork in low-height areas. These strategies ensured future adaptability, circulation efficiency, and design coherence.

Debrief

As seen in Nikita's case, layout planning for commercial interiors is about understanding space, anticipating growth, and working around physical constraints. Your ability to design with accuracy and flexibility determines how usable and scalable the final space will be.

Notes for Facilitation

- Display actual images or diagrams of open offices and commercial zones.
- Use examples of ceiling types, modular furniture, and acoustic materials.
- Provide sticky notes or moveable markers for teams to simulate flexible layouts.
- Reinforce compliance points like corridor width and fire exits.
- Encourage group feedback on each other's proposed designs.

UNIT 13.2: Site Recce, Documentation, and Layout Interpretation

Unit Objectives

At the end of this unit, the participants will be able to:

1. Discuss various technical considerations during site photography and videography.
2. Interpret and identify the appropriate commercial layout based on physical survey and recce.

Say

Before finalizing commercial layouts, it's essential to document site conditions accurately and understand the space in context. Let us learn how a draughtsperson captures physical data through photography, video, and measurements—and how this data supports functional layout decisions.

Ask

- What should you keep in mind when photographing a commercial interior site?
- How can a walkthrough video help the design team?
- What site observations affect commercial layout decisions?
- Why is it important to align layout zones with service points?

Explain

Technical Considerations During Site Photography and Videography

In commercial projects, good photography helps teams understand spatial constraints remotely. Use high-resolution devices and tripods for stability. Take both wide shots and close-ups, especially of sockets, ducts, and structural features. Ensure photos are well-lit, tagged, and organized by location. A walkthrough video shows real-time circulation and connectivity between zones, which supports layout design.

Interpreting Layout Based on Physical Recce

A site recce involves measuring room dimensions, recording service points, and identifying structural constraints. Once data is collected, the draughtsperson interprets it by mapping functions—such as reception, workstations, and breakout zones—based on space availability and client needs. For example, if a beam interferes with ceiling lights, the area may be repurposed for storage. Layout types include open, cellular, and cluster models, adapted for visibility, accessibility, and service alignment.

Debrief

From documentation to layout, a draughtsperson's ability to observe, record, and adapt is what bridges vision with feasibility. With every recce, you gain insights that help you plan more efficient, compliant, and creative commercial spaces.

Notes for Facilitation

- Share examples of site photo logs and video walkthrough formats.
- Use cloud folder structure examples to show how files should be organized.
- Highlight before/after layout adaptations in response to site constraints.
- Encourage participants to cross-check their plan against service access, ventilation, and structural limitations.
- Provide a sample checklist for site photo capture and tagging.

Solution to Exercise

Sample Solution for Activity: Site Photography, Videography, and Layout Interpretation for a Commercial Interior Project

Part A: Site Photography and Videography

Photo Documentation Folder Structure

/Reception
- FrontWall_Reception.jpg
- Ceiling_Reception.jpg

/Work Zones
- NorthWall_Workstations.jpg
- SouthWall_Columns.jpg
- HVACVent_WorkArea.jpg

/Utilities
- Switchboard_Entrance.jpg
- PlumbingPoint_Pantry.jpg

/Openings
- MainDoor_Entry.jpg
- Window_EastSide.jpg

For Video Walkthrough

- Describes movement from entry to workstation
- Highlights obstruction near a central beam
- Shows location of sockets and HVAC duct near the ceiling
- Mentions daylight entry from east window and lack of lighting in the rear pantry corner

Photo Log Sheet

Image Name	Zone	Description / Observation
FrontWall_Reception.jpg	Reception	Shows logo space and light switch
Ceiling_Reception.jpg	Reception	Overhead duct visible, limits false ceiling installation
NorthWall_Workstations.jpg	Work Zones	Continuous socket strip and LAN ports
SouthWall_Columns.jpg	Work Zones	Structural column projecting 300 mm
HVACVent_WorkArea.jpg	Work Zones	Vent placement may interfere with pendant lighting
Switchboard_Entrance.jpg	Utilities	Main switchboard and data cabinet
PlumbingPoint_Pantry.jpg	Pantry	Drainage and water point visible for sink placement
Window_EastSide.jpg	Openings	Large window, good natural light

Part B: Layout Interpretation and Zoning

Sketch: Rough Site Layout (Descriptive Summary)

- Reception positioned near the main door, with branding zone on the north wall
- Workstations arranged in cluster formation around structural columns
- Pantry located in south-east corner where plumbing points are available
- A small meeting room placed in the north-east corner, away from traffic
- Circulation path (min 1000 mm) maintained across the central aisle
- Column near south wall used as a zone divider with a vertical planter

Best-Fit Layout Type: Cluster Layout

Chosen due to column placements and need for team seating flexibility.

Based on the physical survey and site images, a cluster layout was identified as the most efficient option. It accommodates the asymmetric column grid while maintaining flexibility for future reconfiguration. Reception visibility is optimized from the entry. Natural light is utilized near the work zones, and noisy functions like pantry and utilities are isolated. All layout zones align with service points, reducing rework.

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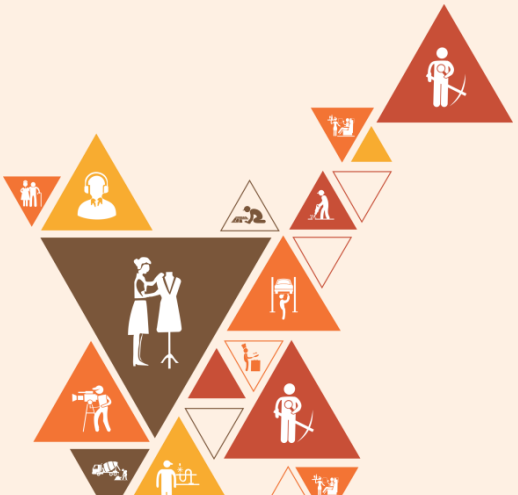
14. Technicalities of Academic Institution Projects

Unit 14.1: Design and Structural Planning in Academic Institution Projects

Unit 14.2: Site Recce, Measurement, and Layout Interpretation



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Key Learning Outcomes

At the end of this module, the participants will be able to:

1. Explain various design considerations and worksite requirements of academic institution space.
2. Discuss the various elements of a masonry structure affecting the academic institution project.
3. Discuss the various techniques associated with layout designing in an academic institution project.
4. Interpret and identify the appropriate academic institution layout based on physical survey and recce.
5. Demonstrate the process of performing measurement activities using specified tools and equipment in an academic institution project.

UNIT 14.1: Design and Structural Planning in Academic Institution Projects

Unit Objectives

At the end of this unit, the participants will be able to:

1. Explain various design considerations and worksite requirements of academic institution space.
2. Discuss the various elements of a masonry structure affecting the academic institution project.
3. Discuss the various techniques associated with layout designing in an academic institution project.

Say

Academic spaces must promote focus, safety, and functionality—while also dealing with the practical limits of old school buildings. Today, we will explore a real case where a draughtsperson designed interiors for a senior secondary school, balancing learning needs with the building's structural constraints.

Explain

Case Study: Technicalities of Academic Institution Interior Designing – A Draughtsperson's Perspective

Priya, a draughtsperson, worked on a government-funded school renovation project involving a science lab, smart classrooms, and library. Her role included conducting detailed site surveys, addressing structural issues like low ceilings and non-removable walls, and creating learning-focused layouts with safety, circulation, and technology in mind.

Design Considerations and Worksite Requirements of Academic Institution Spaces

Academic design requires age-appropriate ergonomics, smooth circulation, ample daylight, and integrated technology. In Priya's case, she also had to ensure fire exits, plan temporary barriers for student safety, and manage execution in phases due to limited school hours. These aspects make institutional design highly user-sensitive and schedule-dependent.

Masonry Structure Elements Affecting Academic Institution Projects

Priya faced several structural constraints: thick load-bearing walls restricted opening sizes, ceiling height limited service routing, and certain dividing walls couldn't be removed. Wall surface deterioration impacted material choices. These elements dictated what could or could not be modified, influencing design and layout placement significantly.

Layout Designing Techniques in Academic Institution Projects

Techniques included zoning (e.g., separate wet/dry areas in labs), grid-based furniture layout aligned with natural light, and service point alignment with structural feasibility.

Flexible furniture was used in smart classrooms and libraries. Priya ensured wide circulation paths for safety and supervision, while her AutoCAD layouts detailed zoning, furniture, and structural elements.

Debrief

As Priya's case shows, designing academic spaces is not just about desks and boards—it is about creating a safe, flexible, and functional learning environment within real-world building constraints. A good draughtsperson must always balance structure with student-focused design.

Notes for Facilitation

- Display sample school layout plans with real site markings.
- Use markers or tags to show areas where structural limits impact layout.
- Discuss classroom design norms (spacing between desks, whiteboard placement, etc.).
- Reinforce safety norms like pathway width and exit access.
- Encourage group critiques of layout feasibility and student usability.

UNIT 14.2: Site Recce, Measurement, and Layout Interpretation

Unit Objectives

At the end of this unit, the participants will be able to:

1. Interpret and identify the appropriate academic institution layout based on physical survey and recce.
2. Demonstrate the process of performing measurement activities using specified tools and equipment in an academic institution project.

Say

Whether it is a classroom, lab, or library, educational layouts must be planned with precision and purpose. In this unit, we will explore how draughtspersons conduct on-site recces and measurements in academic spaces, and how this data helps develop functional, safe, and age-appropriate layouts.

Ask

- What specific aspects of school or college layouts differ from commercial or residential layouts?
- Why is a physical recce important before creating classroom or lab designs?
- What tools help a draughtsperson measure rooms and services effectively?

Explain

Interpreting Layout Based on Recce

The draughtsperson must walk through the site, checking entry/exit, lighting, and any obstructions like columns or wall dampness. Each room type has specific needs: classrooms need evenly spaced desks, labs need secure wet/dry zones, and libraries require quiet and discussion areas. The layout must also ensure clear circulation paths and compliance with school safety standards.

Performing Measurement Using Tools

Before drafting layouts, site measurements are essential. Tools like laser measurers, tape, and angle finders help ensure accuracy. Draughtspersons record room size, door/window dimensions, beam depths, and service locations. This data is noted on a sketch and cross-verified with photos. The resulting base plan ensures furniture fits and helps with design validation and approvals.

Debrief

Just as every student learns differently, every academic space has unique structural and usage needs. Through recce and measurements, draughtspersons lay the groundwork for spaces that are not only well-designed but also safe and effective for teaching and learning.

Notes for Facilitation

- Use images of real classrooms and mark sample measurements on-screen.
- Provide a layout spacing guideline chart (e.g., minimum circulation width, desk-to-board distance).
- Allow peer review of layout plans with feedback on accessibility, alignment, and lighting.
- Highlight how changes in layout can improve visibility, safety, or collaboration in learning spaces.

Solution to Exercise

Sample Solution for Activity: Site Survey, Measurement, and Layout Interpretation in an Academic Institution

Part A: Site Measurement

Measurement Table

Element	Location/Wall	Dimensions (L × W × H)	Remarks
Classroom floor area	Entire room	7400 mm × 5600 mm	Column at northeast corner
Window	West wall	1200 mm × 1500 mm	Opens outward, sill height = 900 mm
Door	North wall	900 mm × 2100 mm	Hinged inward; clear access
Projector mount	Ceiling center	N/A	2300 mm from floor
Blackboard	South wall	3000 mm × 1200 mm	Positioned at 750 mm from floor
Ceiling height	Entire room	3050 mm	Beam depth 300 mm, visible near center
Electrical sockets	East and West walls	4 points at 450 mm height	Suitable for desk-level access

Part B: Layout Interpretation and Recommendation

Layout Sketch Description

- **Teacher desk** placed to the side of the blackboard (south wall)
- **Seating layout**: 4 rows × 4 columns of desks, each spaced with 650 mm clearance
- **Circulation paths**: 1100 mm central aisle; 1000 mm clearance along walls
- **Projector** centered with visibility to all seating positions
- **Column** in northeast corner is used as a divider between seating and a storage shelf
- **Window** on west wall utilized for natural light near reading/collaboration corner

Best-Fit Layout Type: Linear Layout

The linear layout was chosen due to the rectangular shape and column-free central zone. All student desks are aligned facing the blackboard and projector, maintaining 650 mm spacing for comfort and a 1100 mm central circulation path. The window location on the west wall ensures adequate daylight for a reading zone, while the column in the northeast corner is used to define a resource or bookshelf area without obstructing visibility. All service points, including sockets and projector mounts, are integrated into the layout, supporting safety, function, and instructional supervision.

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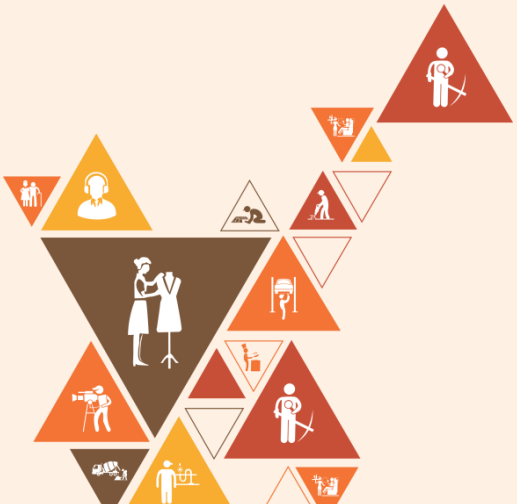
15. Technicalities of Retail Fitout and Exhibitions Projects

Unit 15.1: Design and Structural Planning for Retail Fit-out and Exhibition Spaces

Unit 15.2: Site Analysis and Layout Interpretation in Retail and Exhibition Projects



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Key Learning Outcomes

At the end of this module, the participants will be able to:

1. Explain various design considerations and worksite requirements of retail fitout and exhibitions space.
2. Discuss the various elements of a masonry structure affecting the retail fitout and exhibitions project.
3. Discuss the various techniques associated with layout designing in a retail fitout and exhibitions project.
4. Interpret and identify the appropriate retail fitout and exhibition layout based on physical survey and recce.

UNIT 15.1: Design and Structural Planning for Retail Fit-out and Exhibition Spaces

Unit Objectives

At the end of this unit, the participants will be able to:

1. Explain various design considerations and worksite requirements of retail fit-out and exhibition space.
2. Discuss the various elements of a masonry structure affecting the retail fit-out and exhibition project.
3. Discuss the various techniques associated with layout designing in a retail fit-out and exhibition project.

Say

Retail and exhibition spaces are all about catching attention and guiding visitors with clarity. A draughtsperson must design these environments to be visually impactful, practical for display, and responsive to structural and time constraints. Let us explore how one draughtsperson handled both a flagship showroom and a trade stall project.

Ask

- What makes the design of a retail or exhibition space different from residential or office interiors?
- What challenges can masonry structures present in retail layout planning?
- How can layout techniques guide customer journey and optimize visibility?

Explain

Case Study: Technicalities of Retail Fit-out and Exhibition Projects – A Draughtsperson's Perspective

Rohit, a draughtsperson, managed layout planning for a high-end electronics showroom and a temporary exhibition booth. He dealt with masonry constraints, client branding needs, and time limitations while ensuring that the spaces were engaging, structurally sound, and easy to install. His work involved precise measurement, layout zoning, visibility planning, and on-site coordination.

Design Considerations and Worksite Requirements of Retail and Exhibition Spaces
Retail and exhibition design requires focus on user engagement, branding, product accessibility, and service integration. In this case, Rohit considered flow of movement, display sightlines, accessibility, and demo zones. Worksite constraints included live mall operations, tight exhibition deadlines, and restrictions on structural drilling, requiring him to plan non-intrusive yet effective layouts.

Masonry Structure Elements Affecting Retail and Exhibition Projects
Retail fit-out was impacted by irregular columns, load-bearing walls, uneven floors, and beam drops—affecting symmetry and fixture placement. Exhibition spaces came with booth walls, no-floor-drilling rules, and shared walls with competitors. These structural limitations shaped how displays were positioned, how signage was mounted, and what materials were used.

Layout Designing Techniques in Retail and Exhibition Projects
Rohit used zoning strategies to separate attraction, interaction, and transaction areas. In retail, he aligned modular furniture with grid-based planning and floating displays to avoid wall damage. For exhibitions, he used open plans, central demo zones, and walk-through flow paths with LED lighting. These techniques enhanced usability and brand presence.

Debrief

Retail and exhibition spaces must speak a brand's language while working within physical limitations. Draughtspersons like Rohit succeed when they creatively solve spatial problems such as balancing structure, aesthetics, and functionality to deliver engaging user experiences.

Notes for Facilitation

- Show layout plans of real retail stores and exhibition booths for visual reference.
- Use masking tape or markers to simulate booth layout on floor for group interaction.
- Provide printouts of zoning templates and circulation flow models.
- Emphasize temporary vs. permanent fit-out planning approaches.
- Encourage participants to consider electrical and signage integration in layout.

UNIT 15.2: Site Analysis and Layout Interpretation in Retail and Exhibition Projects

Unit Objectives

At the end of this unit, the participants will be able to:

1. Interpret and identify the appropriate retail fit-out and exhibition layout based on physical survey and recce.

Say

Retail and exhibition spaces must be functional, visually engaging, and aligned with the brand. A draughtsperson plays a key role in interpreting site realities and creating layouts that enhance customer experience. Let us explore how to perform site recce and translate that data into layout decisions.

Explain

Interpreting Layout Based on Physical Survey and Recce

A draughtsperson observes entry points, visibility, and service access to suggest optimal layouts. In retail spaces, they may choose a linear or loop layout to guide customer flow. In exhibitions, layout is adjusted for stall boundaries, high-traffic sides, and utility access. Clear circulation paths and strategic demo zones are essential for visitor engagement and smooth operations.

Survey Focus Areas

- **Entry/Exit**: Analyse how users approach and move through the space.
- **Utilities**: Identify socket locations, lighting grids, and network points for electronic integration.
- **Constraints**: Look for elements like fixed columns or mall ceilings that restrict installation or drilling.
- **Traffic Flow**: Plan how visitors interact with different functional areas such as demo counters, billing desks, or product displays.

Layout Options Explained

- **Retail**:
    - *Linear*: Symmetrical shelving with a central aisle.
    - *Loop*: Customers follow a guided path through all product zones.
    - *Free-flow*: Flexible, open layouts for premium or experiential retail.
- **Exhibition**:
    - *Central Demo Island*: Encourages walk-around engagement.
    - *Side-entry with Peripheral Displays*: Directs movement across corners.
    - *Corner Layout*: Uses angled walls for increased visibility.

Debrief

As we have seen, good layout planning starts with understanding the site. A draughtsperson's ability to interpret entry points, obstructions, and utilities shapes how customers experience a space—whether in a sleek store or a buzzing exhibition booth.

Notes for Facilitation

- Share examples of real stall or showroom plans with annotations.
- Provide layout format visual guides (linear, loop, island).
- Use masking tape to mark zones on the floor for a live demo.
- Reinforce how different layouts serve different branding or product visibility goals.
- Encourage participants to explain their layout choices during peer review.

Solution to Exercise

Sample Solution for Activity: Layout Interpretation for a Retail Fit-out or Exhibition Stall Based on Site Survey

Step 1: Simulated Site Survey – Exhibition Stall (3 m × 3 m Booth)

Observations:

- **Entry Point:** Open front from the hallway (full 3 m width).
- **Back Panel:** Provided by organizer, suitable for branding.
- **Electrical Point:** Floor socket in the rear-right corner.
- **Lighting Grid:** Overhead venue lighting from central truss.
- **Constraints:** Height restriction of 2.4 m; no floor drilling allowed.
- **Obstruction:** Shared side wall with another booth—sound insulation needed.

Photos Captured:

1. Entry view from hallway
2. Floor utility point (rear-right)
3. Overhead lighting truss
4. Right wall (shared with neighbouring stall)
5. Rear panel branding zone

Step 2: Sketch and Layout Interpretation

Layout Elements Marked in Sketch (Top View)

- **Demo Island:** Centered, 1.2 m × 1.2 m (walk-around space maintained)
- **Peripheral Displays:** Along left and rear walls for brochures and product visuals
- **Reception/Interaction Desk:** Front-right corner (facing entry)
- **Storage Box:** Hidden behind rear branding wall panel
- **Circulation Path:** Maintained minimum 1000 mm clear movement space

Layout Type Selected: Open-front with Central Demo Island

An open-front layout with a central demo island was selected to attract visitors walking along the trade hall aisle. This layout supports full frontal visibility and encourages walk-in interaction. Display walls on the left and rear guide the flow toward the center demo, while the right corner reception desk ensures seamless exit. The layout avoids fixed mounting and uses lightweight elements, complying with height and anchoring restrictions. The electrical point placement at the rear enables concealed wiring for demo equipment. Overall, the arrangement optimizes branding, customer flow, and structural feasibility in a compact space.

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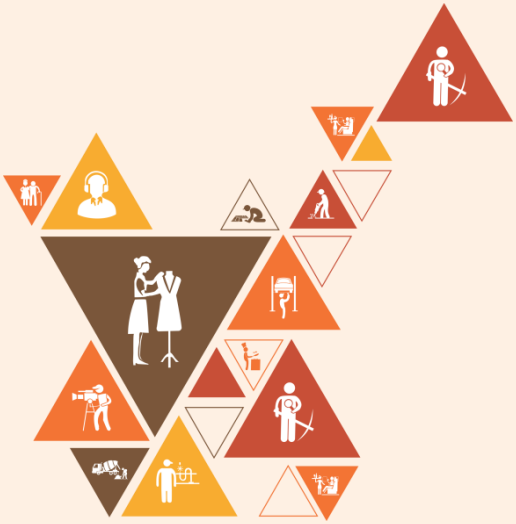
Annexures



Training Delivery Plan

Training Delivery Plan			
Program Name:	Draughtsperson (Interior Design)		
Qualification Pack Name & Ref. ID	Draughtsperson (Interior Design) (FFS/Q0202)		
Version No.	V3.0	**Version Update Date**	
Pre-requisites to Training	Grade 12 pass Or Completed 2nd year of 3-year diploma (after Grade 10) Or Pursuing 2nd year of 3-year regular Diploma (after Grade 10) Or Grade 10 pass with 2 years of any combination of NTC/NAC/CITS or equivalent Or Grade 10 pass and pursuing continuous schooling (for 2 years program) Or Grade 11 Pass and pursuing continuous schooling Or Grade 11 Pass with 1 year of relevant experience Or Grade 10 Pass with 2 years of relevant experience Or Previous relevant Qualification of NSQF Level 3.0 (Multipurpose Draughtsperson) with 1.5 years of relevant experience		
Training Outcomes	By the end of this program, the participants will be able to: • Describe the scope of Interiors and Allied Industries. • Describe the Organizational Map of Interiors and the role of the Draughtsperson (Interior Design). • Follow standards of etiquette and hospitable conduct. • List the different types of interior projects, products, materials, and hardware. • Describe the process and conduct the site survey and recce. • Conduct measurements of the worksite and maintain records. • Draft and modify drawings and designs for interior projects. • Create layouts and 3D renders for interior design mood boards. • Describe the process of preparing interior project dockets and record-keeping. • Communicate effectively with superiors, colleagues, and customers to achieve a smooth workflow. • Maintain health, hygiene, and safety at the worksite. • Discuss various aspects of employability skills and employ such practices towards personal and organizational growth.		

	• Describe the process and conduct the site survey and recce for residential and kitchen Projects. • Draft and modify drawings and designs for residential and kitchen projects. • Create layouts and 3D renders for mood boards of residential and kitchen projects. • Explain the processes involved in interior drafting for residential and kitchen projects and execute the same. • Describe the process and conduct the site survey and recce for hospitality projects. • Draft and modify drawings and designs for hospitality projects. • Create layouts and 3D renders for mood boards of hospitality projects. • Explain the processes involved in interior drafting for hospitality projects and execute the same. • Describe the process and conduct the site survey and recce for commercial projects. • Draft and modify drawings and designs for commercial projects. • Create layouts and 3D renders for mood boards of commercial projects. • Explain the processes involved in interior drafting for commercial projects and execute the same. • Describe the process and conduct the site survey and recce for academic institution projects. • Draft and modify drawings and designs for academic institution projects. • Create layouts and 3D renders for mood boards of academic institution projects. • Explain the processes involved in interior drafting for academic institution projects and execute the same. • Describe the process and conduct the site survey and recce for retail fitout and exhibition projects. • Draft and modify drawings and designs for retail fitout and exhibition projects.

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
Module 1: Introduction to the Role of Interior Designer	Unit 1.1: Interior and Allied Industry	• Describe the scope and significance of the interior industry. • Explain the process flow of	Bridge Module FFS/N0203 KU1,KU2, KU3,KU7	Classroom lecture/ Power-Point Prese	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop	6 Theory (04:00) Practical (02:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		an interior designing project. • Identify the difference between interior drafting, interior designing, and interior project management. • Identify the types of industries enabling the Interiors industry. • Explain the relationship between interiors and the furniture industry. • Analyse different interior projects for the purpose of categorization.	FFS/N0204 KU1,KU2, KU3,KU7, KU24 FFS/N0205 KU1,KU2, KU3,KU7 FFS/N0206 KU1,KU2, KU3,KU7 FFS/N0207 KU1,KU2, KU3,KU7 FFS/N0208 KU1,KU2, KU3,KU7 FFS/N0209 KU1,KU2, KU3,KU7	ntation/ Question & Answer and Group Discussion Hand-on Activity	for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	
	Unit 1.2: Organizational context of Interiors Industry	• Describe the organizational structure and highlight the importance of the interior designing division. • Identify various organizational processes, code of conduct, reporting matrix, and escalation hierarchy. • Explain the importance of working towards team objectives and goals. • Explain the importance of		Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	4 Theory (02:00) Practical (02:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		effective communication and interpersonal skills. • Identify the common reasons for interpersonal conflicts and ways of managing them effectively. • Explain the use of appropriate behaviour and language while communicating with colleagues. • Explain how to report problems that need escalation. • Explain active listening skills while communicating.		Activity		
	Unit 1.3 Digital and Financial Literacy	• Explain the basic parts of a computer, smartphones, and their functioning. • Identify various social media platforms: YouTube, WhatsApp, Facebook, Twitter, etc. • Explain the Bank Account opening procedure and associated terminologies. • Identify the significance of payment methods and gateways for		Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	4 Theory (02:00) Practical (02:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		financial transactions. • Explain the use of appropriate behaviour and language while communicating with colleagues. • Describe how to sign up for an email account. • Describe how to search for a video on the internet. • Explain how to operate various social media platforms: YouTube, WhatsApp, Facebook, Twitter, etc. • Explain the steps involved in a financial transaction using a suitable medium.		Activity		
	Unit 1.4 Role of a Draughtsperson (Interior Design)	• Describe the occupational map of the interiors industry. • Describe the interior designing occupation and related job roles. • Describe the attributes and basic skill sets required for a Draughtsperson (Interior Design). • Explain the role, responsibilities, and key result areas of a		Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	4 Theory (04:00) Practical (00:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		Draughtsperson (Interior Design). • Describe the career progression path for a Draughtsperson (Interior Design) job role. • Discuss the regulatory authorities, laws, and regulations related to an individual while working. • List all the documents required to carry out the job, such as the job card and checklist for oneself. • Explain the importance of job cards and timely reporting to supervisors in employee performance evaluation. • Explain how to fill a sample job card for submission.		Hand-on Activity		
Module 2: Interior Projects, Products, Materials, and Hardware	UNIT 2.1: Fundamentals of Interior Design Projects and Themes	• Identify different types of interior design projects in terms of space. • Describe various types of different interior design themes. • List the various elements of an interior design project and their significance.	Bridge Module FFS/N0204 KU18,KU19,KU20,KU22	Classroom lecture/ Power-Point Presentation/ Question & Answ	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi	6 Theory (02:00) Practical (04:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		• Identify the various interior projects and define the theme and elements.		er and Group Discussion Hand-on Activity	(Min 2 Mbps Dedicated)	
	UNIT 2.2: Interior Products, Material and Accessories	• List the various types and categories of interior products and their usage. • Define the various types of raw materials and accessories used in an interior design project. • Identify different interior projects and list out the interior products used as per their category.		Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	6 Theory (02:00) Practical (04:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
Module 3: Site Survey and Recce for Various Interior Design Projects	UNIT 3.1: Layouts for Interior Design Project	• Discuss the parameters to be considered while interpreting the layout during the site survey. • Apply different approaches to prepare the site layouts and drawings. • Explain different types of interiors designing projects and illustrate their layout - residential and kitchen, hospitality, academic institution projects and retail fit-out and exhibition projects.	FFS/N0203 PC1 FFS/N0203 PC1,PC2,PC3,PC4 FFS/N0204 PC1,PC2,PC3,PC4 FFS/N0205 PC1,PC2,PC3,PC4 FFS/N0206 PC1,PC2,PC3,PC4 FFS/N0207 PC1,PC2,PC3,PC4 FFS/N0208 PC1,PC2,PC3,PC4 FFS/N0209 PC1,PC2,PC3,PC4	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	6 Theory (02:00) Practical (04:00)
	UNIT 3.2: Planning and Conducting Site Recce Operations	• State the significance of recce operation and pre-requisites for same. • Discuss key prerequisites for conducting site survey and recce	FFS/N0203 PC1,PC2,PC3,PC4 FFS/N0204 PC1,PC2,PC3,PC4	Classroom lecture/ Power-Point Presentation/	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations,	8 Theory (04:00) Practical (04:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		of residential and kitchen projects. • Discuss the various prerequisites involved in the site survey and recce based on various interior designing projects - residential and kitchen, hospitality, academic institution projects and retail fit-out and exhibition projects.	FFS/N0205 PC1,PC2,PC3,PC4 FFS/N0206 PC1,PC2,PC3,PC4 FFS/N0207 PC1,PC2,PC3,PC4 FFS/N0208 PC1,PC2,PC3,PC4 FFS/N0209 PC1,PC2,PC3,PC4 FFS/N0203 KU6, KU9,KU10 FFS/N0204 KU6, KU9,KU10 FFS/N0205 KU6, KU9,KU10 FFS/N0206	Question & Answer and Group Discussion Hand-on Activity	PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
			KU6, KU9,KU10 FFS/N0207 KU6, KU9,KU10 FFS/N0208 KU6, KU9,KU10 FFS/N0209 KU6, KU9,KU10			
	UNIT 3.3: Handling Tools and Raw Materials	• Explain the operating guidelines for using different raw materials, tools, and equipment. • Identify various elements of a masonry structure and their representation in the site layouts based on various interior designing projects - residential and kitchen, hospitality, academic institution projects and retail fit-out and exhibition projects. • Explain the operational procedures of various tools and	FFS/N0203 PC2 FFS/N0203 PC1,PC2,PC3,PC4 FFS/N0204 PC1,PC2,PC3,PC4 FFS/N0205 PC1,PC2,PC3,PC4 FFS/N0206 PC1,PC2,PC3,PC4 FFS/N0207 PC1,PC2,PC3,PC4 FFS/N0208	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	6 Theory (00:00) Practical (06:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		equipment in measurement and marking activities. • Identify the appropriate handling equipment for the transportation of materials required as per the sample instruction sheet. • Describe how to examine the worksite and prepare a list of tools and equipment required for the recce.	PC1,PC2,PC3,PC4 FFS/N0209 PC1,PC2,PC3,PC4 FFS/N0203 KU11 FFS/N0204 KU11 FFS/N0205 KU11 FFS/N0206 KU11 FFS/N0207 KU11 FFS/N0208 KU11 FFS/N0209 KU11			
	UNIT 3.4: Site Documentation and Technical Recording	• Explain the process of site photography and videography based on different worksite specifications.	FFS/N0203 PC3,PC4,PC7,PC8	Classroom lecture/ Power-Point Prese	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop	8 Theory (04:00) Practical (04:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		• Discuss various technical considerations during site photography and videography. • Analyse the worksite and employ suitable methods to document the existing site conditions. • Plan the site survey in line with project layouts. • Identify suitable methods to document the existing site conditions at the worksite. • Identify suitable tools and equipment to document the worksite in the form of photos and videos in a commercial project. • Explain how to prepare the measurement sheet in line with the recce conducted for various interior designing projects - Residential and kitchen, Hospitality, Commercial, Academic institution, and Retail fit-out and	FFS/N0203 KU13,KU18 FFS/N0204 KU13,KU18,PC2 FFS/N0205 K KU13,KU18,PC2 FFS/N0206 KU13,KU18,PC2 FFS/N0207 KU13,KU18,PC2 FFS/N0208 KU13,KU18,PC2 FFS/N0209 KU13,KU18,PC2	ntation/ Question & Answer and Group Discussion Hand-on Activity	for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		exhibitions projects.				
Module 4: Site Measurements and Supervision	UNIT 4.1: Measurement Principles and Tools	• Discuss the importance of mathematics and geometry skills in performing measurement and marking activities. • Explain various techniques and tools associated with measurement activities. • Explain the various techniques associated with designing a layout.	FFS/N0203 PC5,PC6 FFS/N0203 KU14,KU17 FFS/N0204 KU14,KU17 FFS/N0205 KU14,KU17 FFS/N0206 KU14,KU17 FFS/N0207 KU14,KU17 FFS/N0208 KU14,KU17 FFS/N0209 KU14,KU17	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (04:00) Practical (04:00) 8 Theory (04:00) Practical (04:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
	UNIT 4.2: Practical Measurement and Sheet Preparation	• Describe how to apply the basic measurement techniques to measure the worksite. • Explain the process of marking the worksite as per the layout and plan. • Prepare the measurement sheet in line with the recce conducted. • Explain how to prepare the measurement sheet for various interior designing projects - Residential and kitchen projects, Hospitality projects, Commercial projects, Academic institution projects, Retail fit-out and exhibitions projects.	FFS/N0203 PC5,PC6 FFS/N0203 KU15,KU16 FFS/N0204 KU15,KU16 FFS/N0205 KU15,KU16 FFS/N0206 KU15,KU16 FFS/N0207 KU15,KU16 FFS/N0208 KU15,KU16 FFS/N0209 KU15,KU16	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	6 Theory (02:00) Practical (06:00) 6 Theory (00:00) Practical (06:00)
Module 5: Drafting for Interior Projects	UNIT 5.1: MEP Coordination and Integration in Interior	• Explain the roles of various Mechanical, Electrical, and	FFS/N0204 PC1	Classroom lecture/	Whiteboard and markers, Chart paper and sketch	8 Theory (04:00) Practical (04:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
	Design	Plumbing (MEP) at the site affecting the product detailing. • Identify the key MEP requirements to be considered while drafting various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions. • Explain how to interpret MEP details based on drawing specifications.	FFS/N0203 KU12 FFS/N0204 KU12,PC5 FFS/N0205 KU12,PC5 FFS/N0206 KU12,PC5 FFS/N0207 KU12,PC5 FFS/N0208 KU12,PC5 FFS/N0209 KU12,PC5	Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (00:00) Practical (08:00)
	UNIT 5.2: Design Foundations, Layout Planning, Material and Ergonomics	• State the significance of rough sketches in the designing process. • Discuss various techniques associated with the layout preparation. • Discuss various	FFS/N0204 PC2,PC3,PC4	Classroom lecture/ Power-Point Presentation/ Question & Answer and	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2	6 Theory (02:00) Practical (04:00) 6 Theory (00:00) Practical (06:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		technical considerations and detailing during product/layout designing. • State the role of aesthetics and ergonomics in product design. • List various types of raw materials used in interior design projects. • Discuss various types of materials, tools, and equipment required in product design and fabrication.		Group Discussion Hand-on Activity	Mbps Dedicated)	
	UNIT 5.3: Digital Drafting and Drawing Execution	• Identify and employ suitable 2D/3D software and techniques to prepare design drafts/drawings/layouts. • Explain how to create layouts and drawings as per the site survey/recce for various interior design	FFS/N0205 PC6,PC7 FFS/N0206 PC6,PC7 FFS/N0207 PC6,PC7 FFS/N0208 PC6,PC7 FFS/N0209 PC6,PC7	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discu	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (00:00) Practical (08:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		projects. • Explain how to modify architectural drawings for interior design purposes.		ssion Hand-on Activity		
Module 6: Mood Boards and 3D Modelling	UNIT 6.1: Mood Board Fundamentals & Material Selection	• Explain the various elements of a mood board. • Explain the various elements and the process of designing a mood board for various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions. • Discuss various types of materials used in product finishing. • State the significance of various design specifications in the designing process. • Analyse the design specification	FFS/N0204 PC5,PC6,PC7 FFS/N0205 PC8,PC9 FFS/N0206 PC8,PC9 FFS/N0207 PC8,PC9 FFS/N0208 PC8,PC9 FFS/N0209 PC8,PC9	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (04:00) Practical (04:00) 8 Theory (04:00) Practical (04:00) 8 Theory (04:00) Practical (04:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		s to identify the mood board layout. • Apply different materials in preparation for mood boards. • Explain the steps involved in preparing the mood boards. • Draft and review layouts for mood boards of different types of projects.				
	UNIT 6.2: Digital Visualization and 3D Design Tools	• Describe the operational procedures for different types of 3D software and their significance in the process. • Identify the use of suitable designing software to create 3D renders/models. • Identify and employ suitable themes and styles for various interior designing projects –	FFS/N0204 PC8, KU21 FFS/N0203 KU8 FFS/N0204 KU8 FFS/N0205 KU8 FFS/N0206 KU8	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (04:00) Practical (04:00) 8 Theory (00:00) Practical (08:00) 8 Theory (00:00) Practical (08:00) 8 Theory (00:00) Practical (08:00) 8 Theory

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions - during the visualization process.	FFS/N0207 KU8 FFS/N0208 KU8 FFS/N0209 KU8			(00:00) Practical (08:00)
	UNIT 6.3: Furniture, Fixtures, and Equipment (FF&E) Selection	• List various types of furniture and interior products/accessories used in residential and kitchen spaces for various interior designing projects. • Identify and select suitable Furniture, Fixtures, and Equipment (FF&E) based on client requirements for various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.	FFS/N0204 PC9,PC10, PC11,PC12 ,KU23 FFS/N0205 PC11 FFS/N0206 , PC11 FFS/N0207 PC11 FFS/N0208 PC11 FFS/N0209 PC11	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (04:00) Practical (04:00) 8 Theory (04:00) Practical (04:00) 8 Theory (00:00) Practical (08:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
Module 7: 2D and 3D Drawings for Various Interior Design Projects	UNIT 7.1: Conceptual Drawing and Site-Specific Factors	• Discuss the key elements to consider for preparing rough sketches of various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions. • Explain various practical, technical, functional, and legal factors associated with various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions. • Discuss the effects of sunlight and other environmental factors affecting space planning for various interior	FFS/N0204, KU8 FFS/N0205, PC5,PC6,PC7,KU8 FFS/N0206, PC5,PC6,PC7,KU8 FFS/N0207, PC5,PC6,PC7,KU8 FFS/N0208, PC5,PC6,PC7,KU8 FFS/N0209 PC5,PC6,PC7,KU8	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (04:00) Practical (04:00) 8 Theory (04:00) Practical (04:00) 8 Theory (04:00) Practical (04:00) 8 Theory (04:00) Practical (04:00) 8 Theory (04:00) Practical (04:00) 8 Theory (00:00) Practical (08:00) 8 Theory (00:00) Practical (08:00) 8 Theory (00:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions.				Practical (08:00) 8 Theory (00:00) Practical (08:00) 8 Theory (00:00) Practical (08:00)
	UNIT 7.2: Drafting Techniques and Layout Planning	• Identify suitable techniques to prepare design drafts of various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions. • Explain how to design layout based on design specifications.	FFS/N0205, PC8,KU16 FFS/N0206 PC8,KU16 FFS/N0207, PC8,KU16 FFS/N0208 PC8,KU16 FFS/N0209 PC8,KU16	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (04:00) Practical (04:00) 8 Theory (04:00) Practical (04:00) 8 Theory (04:00) Practical (04:00) 8 Theory (04:00) Practical (04:00) 8 Theory (04:00) Practical (04:00) 8 Theory (00:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
						Practical (08:00) 8 Theory (00:00) Practical (08:00) 4 Theory (00:00) Practical (04:00)
Module 8: Documentation and Reporting	UNIT 8.1: FF&E File Preparation and Review Process	• List the various elements of a Furniture, Fixtures, and Equipment (FF&E) file. • Explain how to prepare Furniture, Fixtures, and Equipment (FF&E) File for various interior designing projects – residential and kitchen, hospitality, commercial, academic institutions, and retail fit-out and exhibitions. • Explain the process to review drafts prepared by teams	FFS/N0204 PC9,PC10, KU24	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (04:00) Practical (04:00) 4 Theory (00:00) Practical (04:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
	UNIT 8.2: Document Library	• Discuss the importance of creating a documentation library for the designing process. • Explain the process of creating and managing the document library. • Build a documentation library. • Explain the process of timely completion of documents and reporting. • Identify the need for a record-keeping and documentation library in the effective execution of interior designing projects. • Explain the process of maintaining a document library related to various interior designing projects – residential and kitchen, hospitality, commercial, academic	FFS/N0204 PC9,PC10, KU24 FFS/N0205 PC12,KU25 FFS/N0206 PC12,KU25 FFS/N0207 PC12,KU25 FFS/N0208 PC12,KU25 FFS/N0209 PC12,KU25	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (04:00) Practical (04:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		institutions, and retail fit-out and exhibitions.				
Module 9: Health safety, and Greening Practices at the Worksite	Unit 9.1 - Health and Safety Protocols	• Identify all the health and safety protocols associated with working at the worksite. • Appraise suitable health and hygiene protocols while working at the worksite. • Explain various health and safety hazards associated with the project execution during construction and subsequent maintenance. • Analyse and identify worksite site hazards during construction and subsequent maintenance. • Explain the importance of an effective health and	FFS/N8205 PC1,PC2,PC3,PC4,KU9,KU10,KU11,KU12 FFS/N0203 KU4,KU5 FFS/N0204 KU4,KU5 FFS/N0205 KU4,KU5 FFS/N0206 KU4,KU5 FFS/N0207 KU4,KU5 FFS/N0208 KU4,KU5 FFS/N0209 KU4,KU5	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	4 Theory (02:00) Practical (02:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		safety plan during project execution. • Explain how to design and implement a health and safety plan for the worksite.				
	Unit 9.2 - Hygiene, PPE and Worksite Practices	• Identify the poor organizational practices concerning hygiene, food handling, cleaning. • Explain the importance of using Personal Protective Equipment (PPE) based on the manufacturer's instructions and how to use it at the worksite. • Identify the health and safety measures associated with the project designs. • Examine the project design for proper implementation of health and safety	FFS/N8205 PC3,PC4,PC5,PC6,KU16,KU13 FFS/N0203 KU4,KU5 FFS/N0204 KU4,KU5 FFS/N0205 KU4,KU5 FFS/N0206 KU4,KU5 FFS/N0207 KU4,KU5 FFS/N0208 KU4,KU5 FFS/N0209 KU4,KU5	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	4 Theory (02:00) Practical (02:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		measures. • Explain the significance of maintaining work ethics, dress code, and personal hygiene. • Explain the importance of workplace sanitization and demonstrate the correct way of sanitizing and washing hands.				
	Unit 9.3 - Emergency Preparedness and Response	• Explain the operational guidelines for the usage of emergency tools and equipment. • Explain the steps involved in responding to an emergency (fire, short circuit, accidents, earthquake, etc.) process in line with organizational protocols. • Explain the	FFS/N8205 PC8,PC9,PC10 FFS/N0203 KU4,KU5 FFS/N0204 KU4,KU5 FFS/N0205 KU4,KU5	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	4 Theory (02:00) Practical (02:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		first aid procedures in case of emergency and demonstrate CPR. • Identify all the concerned control measures while working at the worksite. • Identify suitable methods to communicate necessary control measures to concerned team members.	FFS/N0206 KU4,KU5 FFS/N0207 KU4,KU5 FFS/N0208 KU4,KU5 FFS/N0209 KU4,KU5	Activity		
	Unit 9.4 - Safety Signs	• Explain the types of hand signals and signage and their application. • Identity and interpret the given pictorial representations of safety signs and hand signals.	FFS/N8205 PC7,KU14, KU15,	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	4 Theory (02:00) Practical (02:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
	Unit 9.5 - Greening Practices	• Explain the various ways of saving energy. • Explain the benefits of periodic cleaning of tools and equipment. • Demonstrate ways for efficient utilization of material and water. • Employ different ways to check if tools and equipment are functioning correctly and report anomalies, if any.	FFS/N8205 PC11,PC12,PC13,KU17,KU18,KU19	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	4 Theory (00:00) Practical (04:00)
Module 11: Technicalities in a Residence and Kitchen Project	UNIT 11.1: Design Themes and Layout Planning for Residential and Kitchen Projects	• List different types of design themes for residential and kitchen spaces. • Discuss the various elements of a masonry structure affecting the residential and kitchen project. • Discuss the various techniques associated with layout designing in	FFS/N0205 PC1,Pc2,PC3,PC4, P6,PC7,PC8,PC9,KU9, KU10,KU11,KU12,KU13,KU14.KU15,KU16, KU17,KU18,KU19,KU20,KU21,KU22,KU23	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (04:00) Practical (04:00) 8 Theory (00:00) Practical (04:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		a residential and kitchen project. • Interpret and identify the appropriate kitchen and residential layout based on physical survey and recce.		on Activity		
	UNIT 11.2: Site Documentation and Measurement in Residential and Kitchen Projects	• Explain the process of performing measurement activities using specified tools and equipment in a residential and kitchen project. • Identify suitable tools and equipment to document the worksite in the form of photos and videos in a residential and kitchen project.	FFS/N0205 PC5,PC10, PC11,PC12 ,KU24,KU25	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (04:00) Practical (04:00) 8 Theory (00:00) Practical (04:00)
Module 12: Technicalities of Hospitality Projects	UNIT 12.1: Design Planning and Technical Considerations in Hospitality Projects	• Explain various design considerations and worksite requirements of hospitality projects. • Discuss the	FFS/N0206 PC1,Pc2,PC3,PC4, P6,PC7,PC8,PC9,KU9, KU10,KU11,KU12,KU13,KU14.KU15,KU16, KU17,KU18,KU19,KU	Classroom lecture/ Power-Point Presentation/	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/	8 Theory (04:00) Practical (04:00) 8 Theory (00:00) Practical (04:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		various elements of a masonry structure affecting the hospitality project. • Discuss the various techniques associated with layout designing in a hospitality project.	20,KU21,KU22,KU23	Question & Answer and Group Discussion Hand-on Activity	Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	
	UNIT 12.2: Site Survey and Measurement Techniques for Hospitality Projects	• Interpret and identify the appropriate hospitality layout based on physical survey and recce. • Explain the process of performing measurement activities using specified tools and equipment in a hospitality project.	FFS/N0206 PC5,PC10, PC11,PC12 ,KU24,KU25	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (04:00) Practical (04:00) 8 Theory (00:00) Practical (04:00)
Module 13: Technicalities of Commercial Projects	UNIT 13.1: Design and Technical Planning in Commercial Interior Projects	• Explain various design considerations and worksite requirements of commercial projects.	FFS/N0207 PC1,Pc2,PC3,PC4, P6,PC7,PC8,PC9,KU9, KU10,KU11,KU12,KU13,KU14.KU15,KU16,	Classroom lecture/ Power-Point Prese	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop	8 Theory (04:00) Practical (04:00) 8 Theory (00:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		• Discuss the various elements of a masonry structure affecting the commercial project. • Discuss the various techniques associated with layout designing in a commercial project.	KU17,KU18,KU19,KU20,KU21,KU22,KU23	ntation/ Question & Answer and Group Discussion Hand-on Activity	for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	Practical (04:00)
	UNIT 13.2: Site Recce, Documentation, and Layout Interpretation	• Discuss various technical considerations during site photography and videography. • Interpret and identify the appropriate commercial layout based on physical survey and recce.	FFS/N0207 PC5,PC10, PC11,PC12 ,KU24,KU25	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (04:00) Practical (04:00) 8 Theory (00:00) Practical (04:00)
Module 14: Technicalities of Academic Institution Projects	UNIT 14.1: Design and Structural Planning in Academic Institution Projects	• Explain various design considerations and worksite requirements of	FFS/N0208 PC1,Pc2,PC3,PC4, P6,PC7,PC8,PC9,KU9, KU10,KU11,KU12,KU	Classroom lecture/ Power-	Whiteboard and markers, Chart paper and sketch pens, LCD Projector	8 Theory (04:00) Practical (04:00) 8

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
		academic institution space. • Discuss the various elements of a masonry structure affecting the academic institution project. • Discuss the various techniques associated with layout designing in an academic institution project.	13,KU14.KU15,KU16,KU17,KU18,KU19,KU20,KU21,KU22,KU23	Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	Theory (00:00) Practical (04:00)
	UNIT 14.2: Site Recce, Measurement, and Layout Interpretation	• Interpret and identify the appropriate academic institution layout based on physical survey and recce. • Demonstrate the process of performing measurement activities using specified tools and equipment in an academic institution project.	FFS/N0208 PC5,PC10, PC11,PC12 ,KU24,KU25	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (04:00) Practical (04:00) 8 Theory (00:00) Practical (04:00)
Module 15: Technicalities of	UNIT 15.1: Design and Structural	• Explain various design consideratio	FFS/N0209 PC1,Pc2,PC3,PC4, P6,PC7,PC	Classroom lecture/	Whiteboard and markers, Chart paper	8 Theory (04:00) Practical

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
Retail Fitout and Exhibitions Projects	Planning for Retail Fit-out and Exhibition Spaces	ns and worksite requirements of retail fit-out and exhibition space. • Discuss the various elements of a masonry structure affecting the retail fit-out and exhibition project. • Discuss the various techniques associated with layout designing in a retail fit-out and exhibition project.	8,PC9,KU9,KU10,KU11,KU12,KU13,KU14.KU15,KU16,KU17,KU18,KU19,KU20,KU21,KU22,KU23	Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	(04:00) 8 Theory (00:00) Practical (04:00)
	UNIT 15.2: Site Analysis and Layout Interpretation in Retail and Exhibition Projects	• Interpret and identify the appropriate retail fit-out and exhibition layout based on physical survey and recce.	FFS/N0209 PC5,PC10, PC11,PC12,KU24,KU25	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion Hand-on Activity	Whiteboard and markers, Chart paper and sketch pens, LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (Min 2 Mbps Dedicated)	8 Theory (04:00) Practical (04:00) 8 Theory (00:00) Practical (04:00)

Module Name	Session Name	Session Objectives	NOS	Methodology	Training Tools/Ads	Duration
						Theory: 78:00 Practical: 162:00
					ES	Theory: 30:00 Practical: 30:00
					Elective 1	Theory: 16:00 Practical: 44:00 OJT: 60:00
					Elective 2	Theory: 16:00 Practical: 44:00 OJT: 60:00
					Elective 3	Theory: 16:00 Practical: 44:00 OJT: 60:00
					Elective 4	180:00
					Elective 5	Theory: 16:00 Practical: 44:00 OJT: 60:00

Assessment Criteria

CRITERIA FOR ASSESSMENT OF TRAINEES

Assessment Criteria	
Job Role	Draughtsperson (Interior Design)
Qualification Pack	FFS/Q0202, V3.0
Sector Skill Council	Furniture and Fittings Skill Council (FFSC)

Sr. No.	**Guidelines for Assessment**
1.	Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each Element/ PC.
2.	The assessment for the theory part will be based on a knowledge bank of questions created by the SSC.
3.	Assessment will be conducted for all compulsory NOS, and where applicable, on the select elective/option NOS/set of NOS.
4.	Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training center (as per assessment criteria below).
5.	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
6.	To pass the Qualification Pack assessment, every trainee should score a minimum aggregate passing percentage of 70% for the QP and a minimum of 70% for each NOS.
7.	In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack **Minimum Aggregate Passing % at QP Level : 70** (**Please note**: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.) **Minimum Passing % at NOS Level: 50** (**Please note**: A Trainee must score the minimum percentage for each NOS separately as well as on the QP as a whole.)
7	The assessment for the theory part will be based on a knowledge bank of questions created by the SSC.

Assessable Outcome	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
FFS/N0203: Conduct site survey and recce for interior design drafting purpose	*Prepare for site survey and recce*	**10**	**15**	**8**	-
	PC1. interpret the site layouts in order to perform the physical survey and recce	3	5	2	-
	PC2. identify and prepare the list of all the necessary tools, materials and equipment required during site survey	2	-	1	-
	PC3. analyse and document existing site conditions based on design specifications	3	5	3	-
	PC4. capture & review the site photographs and videos as required	2	5	2	-
	Conduct the site measurement activities and prepare related documents	**10**	**40**	**17**	-
	PC5. perform measurement and marking activities during site survey	2	20	8	-
	PC6. prepare and review the measurement sheet before handover	3	10	4	-
	PC7. assist in preparing recce reports	3	5	3	-
	PC8. maintain all the required documentation for site survey and recce	2	5	2	-
	NOS Total	**20**	**55**	**25**	-

Assessable Outcome	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
FFS/N0204: Preparation of the drawings for interior design project and team supervision	*Prepare and edit the drawings/ layouts as per the space plan*	**6**	**25**	**8**	-
	PC1. assist in interpreting MEP requirements based on the architectural drawings	2	5	1	-
	PC2. prepare the interior design drafts based on project requirements	1	5	2	-
	PC3. prepare the detailed interior design drawings based on supervisor instructions	2	10	4	-
	PC4. edit/modify the drawings/layouts in line with the project requirement	1	5	1	-
	Assist in developing mood boards and 3D models/ renders	**7**	**24**	**8**	-
	PC5. assist in developing layouts required for mood boards	3	5	2	-
	PC6. assist in preparation of mood board	2	5	1	-
	PC7. assist in concept visualization based on work area themes and requirements	2	4	1	-
	PC8. prepare 3D models/ renders as per the design specifications	-	10	4	-
	Assist in defining scope of work and team supervision	**7**	**11**	**4**	-
	PC9. assist in preparing Furniture, Fixtures and Equipment (FF&E) details based on project requirements	2	3	1	-
	PC10. maintain all the required documentation library	1	3	1	-
	PC11. review the tasks assigned to the the teams and ensure due reporting	2	3	1	-
	PC12. assist in timely filling and submission of required documents to supervisor	2	2	1	-

Assessable Outcome	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	NOS Total	**20**	**60**	**20**	**-**

Assessable Outcome	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
FFS/N8205: Follow workplace health, safety, and environmental procedures	*Maintain cleanliness of the worksite*	**4**	**4**	**3**	**4**
	PC1. identify and report poor organizational practices with respect to hygiene, food handling, cleaning	2	2	-	2
	PC2. ensure that the trash cans or waste collection points are cleared every day	2	2	3	2
	Follow health and safety procedures	**5**	**6**	**8**	**2**
	PC3. comply with the health and safety legislation, regulations, and other relevant guidelines while working at all times	3	3	4	1
	PC4. use appropriate personal protective equipment compatible with the work and compliant to relevant Occupational Health and Safety (OHS) guidelines: masks, safety glasses, head protection, ear muffs, safety footwear, gloves, aprons, etc	2	3	4	1
	Maintain personal hygiene	**4**	**4**	**5**	**-**
	PC5. wear clean clothes as per the dress code of the worksite	2	2	3	-
	PC6. wash hands regularly using suggested material such as soap, one-use disposable tissue, warm water, etc.	2	2	2	-
	Precautionary measures to avoid work hazards	**12**	**16**	**-**	**2**

Assessable Outcome	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	PC7. follow the displayed safety signs at the worksite	3	3	-	1
	PC8. undertake the safety measures and checks while handling any electrically powered tools & equipment, etc	3	7	-	1
	PC9. ensure the usage of harmful chemicals inside work area as per the specified guidelines only	3	3	-	-
	PC10. ensure safe handling and disposal of waste	3	3	-	-
	Ensure material conservation and optimization of resources	**7**	**8**	**6**	**-**
	PC11. implement the suggested ways to conserve and re-use water	1	3	1	-
	PC12. ensure to keep the electrical appliances in OFF position when not in use	3	2	2	-
	PC13. carry out routine cleaning of tools, machines, and equipment as per instruction	3	3	3	-
	NOS Total	**32**	**38**	**22**	**8**

Assessable Outcome	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
DGT/VSQ/N0102: Employability Skills (60 Hours)	*Introduction to Employability Skills*	**1**	**1**	-	-
	PC1. identify employability skills required for jobs in various industries	-	-	-	-
	PC2. identify and explore learning and employability portals	-	-	-	-
	Constitutional values – Citizenship	**1**	**1**	-	-
	PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
	PC4. follow environmentally sustainable practices	-	-	-	-
	Becoming a Professional in the 21st Century	**2**	**4**	-	-
	PC5. recognize the significance of 21st Century Skills for employment	-	-	-	-
	PC6. practice the 21st Century Skills such as SelfAwareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
	Basic English Skills	**2**	**3**	-	-

Assessable Outcome	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
	PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
	PC9. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
	Career Development & Goal Setting	**1**	**2**	-	-
	PC10. understand the difference between job and career	-	-	-	-
	PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
	Communication Skills	**2**	**2**	-	-
	PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
	PC13. work collaboratively with others in a team	-	-	-	-
	Diversity & Inclusion	**1**	**2**	-	-
	PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
	PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
	Financial and Legal Literacy	**2**	**3**	-	-
	PC16. select financial institutions, products and services as per requirement	-	-	-	-

Assessable Outcome	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	PC17. carry out offline and online financial transactions, safely and securely	-	-	-	-
	PC18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
	PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
	Essential Digital Skills	**3**	**4**	-	-
	PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
	PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
	PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-
	Entrepreneurship	**2**	**3**	-	-
	PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
	PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
	PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-

Assessable Outcome	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	Customer Service	**1**	**2**	-	-
	PC26. identify different types of customers	-	-	-	-
	PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
	PC28. follow appropriate hygiene and grooming standards	-	-	-	-
	Getting ready for apprenticeship & Jobs	**2**	**3**	-	-
	PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
	PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
	PC31. apply to identified job openings using offline /online methods as per requirement	-	-	-	-
	PC32. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
	PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
	NOS Total	**20**	**30**	-	-

Assessable Outcome	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
FFS/N0205: Prepare the interior design drawings and renders for Residential and Kitchen projects	*Conduct site survey and recce for different types of Residential & Kitchen projects*	**5**	**11**	**9**	-
	PC1. interpret the type of Residential/Kitchen project in order to perform the physical survey and recce	2	5	3	-
	PC2. identify and prepare the list of all the necessary tools, materials and equipment required during site survey	1	1	1	-
	PC3. analyse and document existing site conditions based on the project specifications	1	2	2	-
	PC4. conduct the site measurement activities and prepare related documents as per the type of Residential/Kitchen project	1	3	3	-
	Prepare and review the 2D drawings and 3D models/renders for Residential & Kitchen projects	**4**	**20**	**15**	-
	PC5. assist in interpreting MEP requirements based on the architectural drawings	4	5	4	-
	PC6. prepare the detailed interior design drawings based on the supervisor instructions	-	5	4	-
	PC7. prepare and modify 3D models/renders as per the design specifications	-	10	7	-
	Assist in preparation of Mood Boards & documentation for Residential & Kitchen projects	**6**	**19**	**11**	-
	PC8. assist in developing layouts required for mood boards of Residential/Kitchen project	1	5	4	-
	PC9. assist in preparation of the mood boards	1	2	1	-
	PC10. assist in concept visualization based on the	1	2	1	-

Assessable Outcome	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	project theme and requirements				
	PC11. assist in preparing Furniture, Fixtures and Equipment (FF&E) details based on project requirements	2	5	3	-
	PC12. maintain all the required documentation library	1	5	2	-
	NOS Total	**15**	**50**	**35**	**-**

List of QR Codes Used in PHB

Module No.	Unit No.	Topic Name	Page No.	URL	QR Code(s)
Module 1: Introduction to the Interiors and Allied Industry	Unit 1.1: Interior and Allied Industry	Introduction to FFSSC		https://www.youtube.com/watch?v=QDdZ3P9IYf4	
	Unit 1.3 Digital and Financial Literacy	Savings Account		https://www.youtube.com/watch?v=pK4wOsCbrK4	
		How UPI Works?		https://www.youtube.com/watch?v=iI2NaN_QVTI	
Module 2: Interior Projects, Products, Materials, and Hardware	Unit 2.1: Fundamentals of Interior Design Projects and Themes	Elements of Interior Design		https://www.youtube.com/watch?v=OuOzTQZMD9s	
	Unit 2.2: Interior Products, Material and Accessories	Integrating Modern Luxury Furniture with Natural Elements, Wood, and Stone		https://www.youtube.com/watch?v=2qssN68fNXI	
Module 3: Site Survey and Recce for Various Interior Design Projects	Unit 3.2: Planning and Conducting Site Recce Operations	INTERIOR DESIGN - SITE ANALYSIS		https://www.youtube.com/watch?v=YX-3O82xEQ0	
		Interior Design - How to Take Site Measurements		https://www.youtube.com/watch?v=OCfKF7nrTM4	
Module 4: Defining Tentative Scope of Work and Planning for Team and Task Delegation	Unit 4.1: Measuring Principles and Tools	Incorporating geometric shapes into interior design		https://youtu.be/RiMvGt2i10o?t=10	

Module No.	Unit No.	Topic Name	Page No.	URL	QR Code(s)
	Unit 4.2: Practical Measurement and Sheet Preparation	How to Take Site Measurement		https://www.youtube.com/watch?v=xHY2fVTvITI	
Module 5: Drafting for Interior Projects	Unit 5.2: Design Foundations, Layout Planning, and Ergonomics	Space Planning and Ergonomics in Interior Design		https://www.youtube.com/watch?v=mvnZL-ZX0d8	
	Unit 5.3: Digital Drafting and Drawing Execution	Making a simple floor plan in AutoCAD		https://www.youtube.com/watch?v=hO865EIE0p0	
Module 6: Mood Boards and 3D Modelling	Unit 6.1: Mood Board Fundamentals and Material Selection	Create a Mood Board Step by Step Easy Tutorial Using Canva		https://www.youtube.com/watch?v=EJRwAxdQyLM	
	Unit 6.2: Digital Visualization and 3D Design Tools	Sketchup Tutorial for Beginners		https://www.youtube.com/watch?v=GOZkvQwtjZ4	
Module 7: 2D and 3D Drawings for Various Interior Design Projects	Unit 7.1: Conceptual Drawing and Site-Specific Factors	Form, Orientation and Sunlight		https://www.youtube.com/watch?v=ly8orBNiNQM	
	Unit 7.2: Drafting Techniques and Layout Planning	Drawing Floor Plans		https://www.youtube.com/watch?v=h3JKJO7-O4I	
Module 8: Documentation and Reporting	Unit 8.1: FF&E File Preparation and Review Process	Create FF&E Product Specification Sheets		https://www.youtube.com/watch?v=IdY-pjQDujg	
Module 9: Health, Safety and Hygiene Protocols while Designing	UNIT 9.3: Emergency Preparedness and Response	**Cardiopulmonary Resuscitation (CPR)**		https://www.youtube.com/watch?v=hTS6gtaTHcI	

Module No.	Unit No.	Topic Name	Page No.	URL	QR Code(s)
		How to Use a Fire Extinguisher		https://www.youtube.com/watch?v=w4jHpHoYZhk	
	UNIT 9.4: Safety Signs	**Essential Safety Signs**		https://www.youtube.com/watch?v=SqZ5np_lCr0	

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